EGE AKADEMİK BAKIŞ

Ekonomi, İşletme, Uluslararası İlişkiler
ve Siyaset Bilimi Dergisi

EGE ACADEMIC REVIEW

Journal of Economics, Business Administration,
International Relations and Political Science

Ege Akademik Bakış

Ege Akademik Bakış Dergisi, iktisat, işletme, uluslararası ilişkiler ve siyaset bilimi alanlarında çalışan akademisyenler, araştırmacılar ve profesyonellerin görüşlerini paylaştıkları bir forum oluşturmak amacıyla, bu alanlarda yapılmış olan uluslararası çalışmaları kapsamaktadır. Ege Üniversitesi İktisadi ve İdari Bilimler Fakültesi tarafından Ocak, Nisan, Temmuz ve Ekim aylarında olmak üzere yılda dört defa yayınlanan hakemli bir dergi olup, Türkçe veya İngilizce olarak kaleme alınmış tüm çalışmalar dergide yayınlanmak üzere gönderilebilir. Ege Akademik Bakış Dergisi aşağıdaki veri tabanlarınca taranmaktadır:

- EconLit (http://www.aeaweb.org/)
- ULAKBİM, Sosyal ve Beşeri Bilimler Veri Tabanı (http://www.ulakbim.gov.tr/)
- Emerging Sources Citation Index (ESCI)
- Director of Open Access Journals(http://www.doaj.org/)
- EBSCO Publishing (http://www.ebscohost.com/)
- PERO(http://knjiznica.irb.hr/pero)
- Scientific Commons(http://en.scientificcommons.org)
- WorldWideScience(http://worldwidescience.org)
- ProQuest(http://www.proquest.com)
- ASOS Index(http://www.asosindex.com)
- RePEc (http://www.repec.org)

Makaledeki görüşler yazarlarına aittir. Dergide yayınlanan makaleler kaynak göstermeden kullanılamaz.

Ege Academic Review includes international papers about economics, business administration, international relations and political science with the aim of providing a forum for academicians, researchers and professionals interested in these fields. This journal is subject to a peer-review process. Ege Academâic Review is published by Ege University Faculty of Economics and Administrative Sciences for four times in a year. Papers written in Turkish and English can all be sent in order to be published in the journal. The articles in Ege Academic Review are indexed/abstracted in:

- EconLit (http://www.aeaweb.org/)
- ULAKBİM, Social Sciences and Humanities Database (http://www.ulakbim.gov.tr/)
- Director of Open Access Journals(http://www.doaj.org/)
- EBSCO Publishing (http://www.ebscohost.com/)
- PERO(http://knjiznica.irb.hr/pero)
- Scientific Commons(http://en.scientificcommons.org)
- WorldWideScience(http://worldwidescience.org)
- ProQuest(http://www.proquest.com)
- ASOS Index(http://www.asosindex.com)
- RePEc (http://www.repec.org)

Authors are responsible for the content of their articles. Papers published in the journal can not be quoted without reference.

Contents

Young Labour Force and Labour Market Harmony in A Developing Economy: Turkey TRB2 Region Survey

Mustafa Çağlar ÖZDEMİR[1] ⓘ, Volkan IŞIK[2] ⓘ

ABSTRACT

The aim of this study is to discover the root causes of the labor market adjustment problem, which has not been resolved for a long time in Turkey, on the most fundamental basis and by observing in the least developed region. The study is based on data obtained from qualitative and quantitative field studies that lasted approximately nine months as part of a research project supported by the Eastern Anatolia Development Agency (DAKA). According to the results, social skills deficiencies have been identified among the causes of labor market conflicts and vocational skill deficiencies in regions with low socio-economic development. Contrary to most studies on education-employment fit, the results of this study show that central education remains a habit for the labor market parties but does not meet the expectations of both parties.

Keywords: Regional Development, Vocational Education, Education Policies, Labour Force Adaptation, Labour Market.

JEL Classification Codes: J21, J24, J23

Referencing Style: APA 7

INTRODUCTION

Development is the main aim of all countries. Utilising the current potential at the most appropriate level with the effective use of scarce resources is one of the main topics of discussion today. At the 75th General Assembly meeting of the United Nations, it was highlighted that it should be more sensitive to sustainable development goals and focus on regional development policies (UN, 2020).

Development is directly related to welfare, quality of life, and economic growth. However, the fact that development constitutes a multi-component problem area makes its analysis of economic growth only insufficient. For this reason, many components are included in development plans, from poverty to education, health to clean energy, and decent work to gender equality.

Human capital, which expresses the knowledge, skills, and experiences of labour through education (Becker, 1993), is one of the essential components of economic development. Therefore, human resources that are better educated and have qualifications compatible with market needs have an indispensable place in the development process together with physical capital (Karataş and Çankaya, 2010).

Among NUTS Level-2 regions, the classification of Turkish Statistical Region Units TRB2 (Bitlis, Hakkari, Mus, and Van provinces) is the least developed Region in "development labor market problems" and "labor market-vocational education incompatibility problems" in Turkey. Therefore, problems regarding human capital in the region constitute an essential obstacle to regional development (Celikkaya, et al. 2018).

To sustain the regional development process competently and produce effective policies, in-depth studies need to be conducted that allow the potential to be accurately determined in regions where labour market mismatch is intense. Based on the need mentioned, the research was carried out in provinces with low socio-economic development, such as Bitlis, Hakkari, Mus, and Van, within the scope of a project with the Eastern Anatolia Development Agency (DAKA). The research

[1] Prof., Sakarya University, Department of Labour Economics and Industrial Relations, Sakarya, Turkey, cozdemir@sakarya.edu.tr

[2] Assoc. Prof., Hacettepe University, Vocational School of Social Sciences, Ankara, Turkey, volkani@hacettepe.edu.tr

consists of four stages: (1) Current Situation Analysis, (2) Identification of Problems with Stakeholders and SWOT Analysis Workshop, (3) Fieldwork, (4) Compilation of Results, Reporting, and Action Plan. Each stage was carried out with the broad participation of public institutions and organizations, the private sector, and worker representatives.

This study covers the results obtained in the 1st, 2nd and 3rd stages of the research.

BACKGROUND OF THE SUBJECT AND LITERATURE

Based on the regional development issue, which has a rich scientific literature, it is primarily emphasized that the structural characteristics of the regions have a significant role in the development and that the human capital potential must be correctly determined for the regional development to move to be successful (Illeris, 1993; Ferrari et al., 2012; Pike, et al., 2010; Frédéric and Daviet, 2010). Research has demonstrated that central policies alone are insufficient to create the expected benefits in development, therefore the need for practical cooperation and sharing with local actors to identify and support regional dynamics (France PACA, China Regional development, Indonesia, France, and Spain regional development experiences. (Hirschman, 1958; Mrydal, 1971; Hansen, 1990; Hill, 1998; Hummelbrunner and Lukesch, 2008; Lang-Görmar, 2019).

Hummelbrunner and Lukesch (2008), whose concrete classification on the subject is suitable for the purpose and scope of our study, attributes the success of regional development processes to the following conditions: (1) The economic, social, cultural, and physical resources in a region should be maintained in interaction and cooperation, (2) public and private policies must be implemented in a mixed manner, (3) the demands and interests of regional social actors must be fully understood and taken into account, (4) region-specific products and services must be segregated and highlighted with emphasis on uniqueness, (5) all policies should be sustainable, and planned and implemented at a level that can be transferred to the future.

Regional development discussions in Turkey have been on the agenda since the beginning of the planned period. Although regional sensitivity is clearly emphasized in development plans, it is seen that the desired success has not been achieved. Therefore, it was decided to establish Development Agencies throughout Turkey in 2006 to support regional development. Development

agencies in Turkey have been established within the framework of the EU harmonization process. The Eastern Anatolia Development Agency (DAKA) responsible for the TRB2 region, which includes the provinces in the sample of our research project (Bitlis, Hakkari, Mus, and Van), was established in 2008. Thus, conducting research that allows the region's potential to be accurately determined to sustain the regional development process competently and produce effective policies has become more accessible. DAKA has also created the infrastructure of this research on the labour market.

To ensure the efficiency and effectiveness of labour markets, various policies and strategies are being developed to address fundamental problems such as reducing unemployment, establishing the education-employment balance, preventing underemployment, increasing the supply of qualified labour, combating youth unemployment and eliminating the youth trend neither in employment nor in education and training (NEET). Under the influence of global competition, efforts have been made to find solutions to the problems of labour supply and demand mismatch in qualification and skill needs due to high unemployment and the prevalence of unregistered employment areas, especially in the labour markets of developing countries. (Kanbur and Svejnar, 2009).

It is seen that unemployment is increasing day by day due to structural reasons in developing countries such as Turkey. However, this problem differs by region, and the level of incompatibility changes due to interregional inequalities in development. For example, while the high skill balance draws attention in regions where the manufacturing sector and technology-intensive production are concentrated, it is seen that the low skill balance trap occurs in less developed regions where labour-intensive production areas are common such as agriculture and animal husbandry (OECD, 2017). Therefore, adapting to different strategies of the labour market requires different strategies in these regions with low skills and creates a low-skill balance trap. Because of this, it is essential to develop national policies and strategies to ensure that the balance of education and employment is regionally oriented in line with local needs (Rees, 2006).

TRB2 region provinces included in the Employment and Talent Strategies OECD Report have been shown as a low-skill equilibrium trap area in Turkey (OECD, 2017). According to the 2017 Social and Economic Development Index study prepared by the Ministry of Development, TRB2 region provinces are residual. TRB2 region provinces are the provinces with a high level of

education-employment conflict in line with the goal of "restructuring vocational education within the scope of Industry 4.0" in the 100-Day Execution Program published by the Presidency of the Republic of Turkiye the Ministry of National Education's industrial and vocational secondary education mapping. These reports and studies reveal the urgency of creating a project and action plan to harmonize the labour market with vocational education in the TRB2 region. Central education-employment policies developed for all development levels do not work as development moves away from the general. For this reason, this study aims to develop policies specific to the regions with the lowest development level instead of central policies; It is expected to contribute to regional development policies in other developing countries significantly.

METHODOLOGY

It is observed that the labour market needs cannot be met at the desired level with vocational training throughout Turkiye and in the region where the study is conducted (DAKA, 2018). Considering this problem that has been going on for years, research questions have been determined as follows:• What is the reason for vocational education-employment mismatch despite all efforts?

- Why has the desired success not been achieved despite the studies and arrangements made for vocational training?

- Is making vocational and technical education more qualified enough to achieve the targeted adaptation?

- With the current vocational training system, can young people adapt to the labour market effectively?

On the axis of these questions, a research project has been initiated to discover labour market incompatibilities within the framework of the views of all actors and develop realistic suggestions with vocational training, which is highly important to support the labour market in regional development. A mixed approach that integrates qualitative and quantitative methods was followed in the fieldwork. Mixed research is a method that combines both quantitative and qualitative methods to produce the expected results (Creswell and Clark, 2017). This method was preferred because the results attempted to be obtained within the parameters of the investigation were multidimensional. The data were collected using original questionnaires developed within the scope of the research.

The interview questions used in the qualitative research were formed by utilizing the SWOT analysis results. The reliability of the questions within the scope of qualitative research was tested at the Vocational Education Van Model workshop held between 18-20 November 2019 in cooperation with the Van Provincial Directorate of National Education and Eastern Anatolia Development Agency (DAKA). On the third day of the workshop, which was held with the participation of public and private sector representatives, qualitative research questions were asked to the parties regarding their opinions, determinations and solution suggestions regarding the problems in the region in general. Evaluations were made regarding the project of harmonizing the labor market and vocational education in the TRB2 region and unnecessary, vague and difficult to understand questions were removed.

Through the pilot interviews conducted at the workshop, the content of the questions in the semi-structured interview forms, the language used, clarity, subject-question appropriateness, and the length of the interviews were checked. In this context, questions that repeated each other and led the participants give similar answers were removed from the interview form to use the time correctly, and some expressions used in the questions were changed to be more understandable.

Fieldwork

Field studies within the scope of the research were carried out in two directions:

1. SWOT Analysis is carried out to determine the Strengths-Weaknesses and Opportunities-Threats regarding the current situation of the labour market in the TRB2 Region.

2. Demand-oriented determination of the perceptions, attitudes and behaviors of sector representatives, employers, and presidents of chambers of commerce and industry with employment potential using the qualitative method,

3. Supply-oriented determination of the opinions of the textile employees, tourism sector employees, employees in organized industrial zones and small industrial sites, and students continuing their education in vocational high schools using the quantitative method.

During the SWOT Analysis some essential topics related to the labor market, such as labor market problems, the importance of vocational training, unemployment and employment, youth unemployment, gender, qualification mismatch, underemployment, and R&D, were introduced to the participants, and opinions were collected in line with the following questions:

- What are the "strengths" in the current situation?

- What are the "weaknesses" in the current situation?

- Which "opportunities" can be utilized in the relevant external environment?

- Which "threats" can be considered in the relevant external environment?

Five separate tables were formed for the Construction, Health, Agriculture, Textile, and Tourism sectors, which are included in the National Employment Strategy and whose participants were determined with the support of DAKA. The selection of the relevant sector representatives determined by DAKA was based on the criteria of "employment potential in TRB2 Region" and "need for labour force with vocational training".

All participants were given adhesive papers in different colors to write their strengths and weaknesses. They were asked to write a single proposition on each paper. These propositions were pasted on the boards next to each table so everyone could see them. The participants were informed that a single score sticker should be attached to each topic. The topics were ranked from the most points to the most minor points.

During the demand-oriented fieldwork, focus group meetings and in-depth interviews were held with the heads of chambers of commerce and industry, company owners, and/or representatives in the region. In the first stage, meetings were held with the heads and the delegation of the Van and Tatvan Chambers of Commerce and, and the subject was explained, and their opinions were collected. In the second stage, 28 employers or representatives from 11 different sectors operating in the region were interviewed within the scope of the questions prepared previously.

The focus group interview method allows the creation an adequate data set by increasing the effectiveness of group dynamics' responses to questions according to individual interviews. There are differences between individual behavior and behavior within the group. While individuals maintain their normative patterns between groups, they also represent the culture and system of values they live in. Groups can look from a broader perspective than individuals (Aksu, 1996; Gönüllü, 2001). Thus, it can create more options for problem-solving. Considering the aforementioned advantages, the first phase of the TRB2 region labour demand research was initiated with a focus group meeting with the relevant people.

In selecting samples, representatives of priority sectors in provinces and districts with high employment and production potential in the region, employers, and chambers of commerce and industry were used in line with the recommendations of DAKA. Open-ended questions directed to the participants in the focus group and the meeting was open for discussion individually, and all participants could speak.

In the supply-oriented field study, questionnaires prepared for individuals in employment representing the labour force supply profile in the TRB2 region and vocational education students who will not be included in the labour force due to their continuing education and will enter the labour market were applied. The first level of the supply-oriented fieldwork was conducted with a total of 882 people, including textile city workers (140 people), tourism sector employees (166 people), employees in the organized industrial zone (OIZ) and small industrial sites (SIS) (576). The second level of research was conducted with 675 students continuing their education in vocational high schools. Both sample numbers are more than those calculated with a 95 percent confidence interval (5% significance level) (Saunders, 2019).

In determining the first level research sample, individuals employed in companies in textile cities, tourism, organized industrial zones, and small industrial sites in provinces and districts with high employment and production potential were taken into consideration in line with the recommendations of DAKA and regional chambers of commerce.

Analysis of Data

SPSS 23.0 (Statistical Packages for Social Sciences) package program was used to analyse and interpret the collected quantitative data. In the analysis of the data obtained from the quantitative research, the frequency values and percentage shares for the questions in the questionnaire are presented in tables.

The quantitative research question form was organized under the heading below;

- Demographic questions (12 questions)

- Questions to determine the labor force situation (11 questions in total, including yes-no (10) and sector selection (1))

- Questions for qualification (20 triple Likert-type questions)

- Perception questions on vocational education (18 triple Likert-type questions)

- Questions to determine future expectations (5 open-ended questions)

Chronbach's alpha calculations within the framework of numerical data sets except demographic questions;

- For the questions on the determination of labor force status, 867

- For questions related to the determination of qualifications, 871

- For the questions on perception towards vocational education, 768

- For the questions on determining future expectations, 787

- The average Chronbach's alpha coefficient was calculated, 823.

Questions were clustered close to the form design in frequency distribution.

The qualitative data collected were transferred to the computer environment simultaneously with the interviews, and the relevant transfer was shared and confirmed with the participants. As a result of the focus group meeting, a balance was observed between systematic information and participants' comments while writing the report. Feedback was given to the participants about the report draft. The data were then analysed, classified, discussed, and reported with an inductive approach.

FINDINGS

The findings within the scope of the research are classified under three main headings; SWOT analysis results, demand-oriented data collected by qualitative method and supply-oriented data collected by quantitative method.

SWOT Analysis Results

Strengths of the region;

- Tourism potential of the region,

- Presence of trainable young population and low labor costs,

- Widespread agriculture and animal husbandry,

- Geopolitical position,

- Open communication channels with the region and its districts,

- Restructuring of public institutions after the earthquake.

Weaknesses of the region;

- Negative image of the region throughout Turkiye,

- Ineffective use of the labor force potential in the region,

- Inadequate promotion of the region and inadequate utilization of tourism potential,

- Inadequacy of general education and vocational training,

- Undeveloped industry,

- Unplanned urbanization, population growth, and lack of infrastructure,

- Inadequacy in public and private sector co-operation,

- Lack of social solidarity and co-operation,

- Ineffective utilization of agriculture and animal husbandry potential,

- Economic problems and the cost of living.

Opportunities of the region;

- Characteristics favorable for investment,

- Cultural and historical tourism potential,

- Potential in terms of agriculture and animal husbandry,

- Underground and surface resources,

- Efforts to train skilled labour force and institutional support in this regard,

- Improvement of co-operation between public institutions and public services,

- Increasing recognition of the region.

Threatens of the region;

- Security and terrorism,

- Social problems due to ecological degradation and lack of green space,

- Moral erosion due to drug and substance abuse,

- Failure to retain qualified people in the region,

- Disorders in the merit system and related administrative failures,

- Poor standards of education,

- Failure to protect the natural brand values specific to the region,

- Income inequality and unemployment,

- Prevalence of gender discrimination,

- Unplanned economy and low investment rates,

- Geopolitical position of the region and events in neighbouring countries,

- Social aids and supports push individuals to laziness,

- Being a disaster area.

Qualitative Research Findings

The sectoral distribution of the companies participating in the research is shown in Table 1. It is seen that textile and tourism come to the fore in the sectoral distribution of the companies within the scope of qualitative research in the region. The companies interviewed were determined by considering the sectoral distribution density and diversity in the labour market of the TRB2 region.

The firms within the scope of the research differ in terms of institutionalisation level, workforce profile, and firm size. Therefore, although it is thought that the labour force demands of the companies will also differentiate, similar thoughts have been found in their approach to vocational training.

Perceptions and Attitudes Regarding Vocational Education and Labour Supply in the Region

All participants in the qualitative research, shown in Table 1, stated that "*despite the quantitative expansion of vocational education graduates in the TRB2 region, their needs and expectations are not met qualitatively*".

All of the participants support vocational training activities. In this sense, it is understood that they provide an opportunity for workplace training to carry out institutional activities related to the required competence levels, primarily through the development of school-industry cooperation.

Table 1. Sectoral Distribution of the Companies Participating in the Research

Sector	F	%
Textile	8	28,6
Tourism	5	17,9
Automobile maintenance, repair, and spare parts	4	14,3
IT and Media	3	10,7
Construction	2	7,1
Drill pipe manufacturing	1	3,6
Steel door manufacturing	1	3,6
Packaging	1	3,6
Food	1	3,6
Retail	1	3,6
Aluminum manufacture	1	3,6
Total	28	100

Perception Regarding the Reasons for Unavailability of the Needed Workforce in the Region

Almost all participants responded negatively to the question, "*Can you easily find the qualified workforce you need in the region?*". The following responses were also provided to the question "*Why do you think it cannot be found?*":

- The vocational education system in the region is insufficient to train the qualified labour force needed by the private sector,

- The vocational education system is designed without taking into account the needs of the production process and labour force demand,

- Higher education is too academic and leads to over-education,

- They stated that most employers provide training in the workplace because the qualifications and skills needed by the private sector are not offered in schools.

- From these answers, it is understood that the training either provides quality above the market need or is insufficient to meet the needs.

The Definition of Ideal Workforce Profile and Expectations in Regard to the Needs

Almost all participants think that "*having educational documents such as high school, vocational high school, associate degree or bachelor's degree does not mean having the qualifications required by the job*". In this context, as stated before, there is an opinion among the participants that" *theoretical education received by new graduates is not generally related to the practice.*"

The order of skills that participants demand when defining their ideal workforce varies by sector. However, "*business ethics, honesty, business ownership, taking responsibility, work discipline*" stand out as standard variables for all sectors (table 2). It was emphasised that the lack of professional skills could be eliminated practically in workplaces. Still, skills such as work ethics, keeping promises, responsibility, and honesty must be gained in formal education.

Participants have a decisive judgment that the young population potential of the region is not used sufficiently. Among the main reasons are the vocational training incompability with the labour market and the characteristics of generation Y, which are difficult to overcome with the standard curriculum in schools.

Table 2: Skill Sets Expected from the Ideal Workforce (in order of priority-First 3)

Sector / Business	Technical Skills
Textile	1. Professional/technical knowledge and experience 2. Social media management 3. Creativity and design
Tourism	1. Taking responsibility 2. Oratory and diction 3. Problem-solving
Automobile maintenance, repair, and spare parts	1. Business ethics 2. Communication and expression ability 3. Oratory and diction
IT and Media	1. Professional/technical knowledge and experience 2. Oratory and diction 3. Communication and expression ability
Construction industry	1. Business ethics 2. Taking responsibility 3. Physical and physical competence
Manufacture	1. Entrepreneurship 2. Business ethics 3. Sales management and marketing
Packaging	1. Business ethics 2. Creativity and design
Food	1. Social media management 2. Sales management and marketing 3. Persuasion

Quantitative Research Findings

The supply-oriented research has been carried out in two dimensions, targeting individuals in employment and students receiving vocational training.

Quantitative Research Findings for Employees

According to TURKSTAT Household Labour Force Survey Level-2 results, female labour force participation in the region is generally low (27.4%) and below Turkiye's average (53%). As a reflection of this situation, only 12% of those employed and participated in the research are women.

70% of the participants are 34 years old and younger. This situation is a reflection of the density of the young workforce in the region.

Almost half of the participants (47.7%) have high school-level education. Approximately 30% were primary school graduates, while 20% had a university degree. Almost half of the university graduate participants have a postgraduate education.

It is seen that more than half of the employed individuals participating in the research (54.1%) have families of 5-7 people. Despite this, the number of people working in the family is between 1 person (37.4%) and two persons (36.1%). This situation shows that the number of dependents in the households in the region is high.

When the variables related to the participant's employment status are examined, it is seen that 79.3% of them work full-time. On the other hand, 48.6% of the participants work informally (without insurance). This data confirms that the region's unregistered employment rate is above the Turkiye average of 34.5% (SGK). Participants' average monthly wages are also low, in line with the prevalence of unregistered work. Accordingly, approximately 1 out of every 3 participants (31.9%) works with a wage below the minimum wage. Considering that the number of people living in the same household in the demographic variables is concentrated in the range of 5-7 people and the number of employees in the household is mainly 1 to 2, average wage data show that poverty is expected in the region.

Table 3. Skill/qualification levels that the employed people think they have

Skill / Attribute	Level (%)		
	Low%	Mid%	High%
Professional/technical knowledge and experience	4,3	23	71,2
Physical and physical competence	3,1	14,6	80,6
Teamwork predisposition	3,9	14,5	80,4
The ability to communicate and express	4,2	19,6	74,9
Problem solving	2,4	16,4	79,9
Work ethic	1,4	12,2	84,6
Oratory and diction	11,7	28,2	58,5
Taking responsibility	2,5	15,3	80,7
Basic computer skills	42,3	29,4	24,5
Advanced computer skills	72	15,2	9,1
Foreign language	72,1	17,5	6,5
Sales management and marketing	12,4	24,8	59
The ability to persuade	3,1	26,3	68,5
Advertising	29,7	19	47,1
Social media management	24,5	23,9	47,8
Calculation	6,5	19,7	70,6
Creativity and design	17	24,6	54,6
Entrepreneurship	11,8	22	62,7
Project-based work	21,7	21,7	52,6
Panic management (ability to work under stress and pressure)	10,8	18,8	67,2
I am generally skilled	3,5	14,7	78,9

N = 882

When the data on the sector in which work is examined, according to the order of density in the region, professional, scientific, and technical activities (21.1%), accommodation and food services activities (17.6%), and manufacturing (16.4%) are in the top three.

In the previous stage, employers' expected skill sets from the ideal workforce were determined. Relevant skills were added to the supply-oriented quantitative research questionnaire, and individuals' perceptions of employment towards their qualification levels were also measured. Table 3 shows the proportional values obtained from the Triple Likert scale regarding the participant (individuals in employment) perceptions of ordinary skills using a graduated scale.

As a result of the analysis, the employees think that the employers have most of the technical skills they want, but (as seen in the previous research phase) employers think that the employees do not have these skills. In this case, either the employers do not consider their employees' skills as sufficient, or the employees cannot show their skills to the employers sufficiently. The perception mismatch can make the programs and implementation efforts to overcome the skill deficiency inefficient.

Apart from the relevant skill data set,"*If a center is established to develop and support vocational training in the region, do you request training from here to complete the skills you find yourself lacking*". Again, 80% positive answer was received to the question. This result supports previous findings.

Quantitative Research Findings for Students Receiving Vocational Education

In the second stage of the quantitative research, Findings regarding the questionnaire applied to the sample group of 675 students from the vocational education institutions in the provinces of the TRB2 region (Bitlis, Hakkari, Mus, and Van) were included.

57% of the students participating in the study are females, and 43% are males. According to the Ministry of National Education statistics, 51.2% of the students who receive vocational and technical high school education in the TRB2 region are male, and 49.8% are female. In this context, it is seen that the gender distribution of the students participating in the research is compatible with the distribution in the region.

Considering the age distribution of the students participating in the study, it is seen that 93.6% of them are between the ages of 14-18 because they are vocational high school students.

It is seen that more than half of the students participating in the study (60.9%) have families of 5 to 7 people. Despite this, the number of people working in the family is between 1 person (66.2%) and two persons (15.4%). The proportion of those with no employees in their families is 9.9%. Due to the structure of the region, considering the density of dependent people in households, the effects of the unemployment rate of 9.9% are also growing.

The students were asked whether they had sufficient financial means to continue their education. Only 32% stated they have sufficient financial means (43% stated they have partial financial means).

Most (90%) of the students participating in the study think they will have better living conditions by getting an education. However, most students (83%) stated that their families supported them in continuing their education. Based on these results, it can be said that the negative picture of schooling and continuing education in the region have started to change positively.

In the previous research stage, a sub-question form was created for the students using the skill set asking to the employers.. The purpose of this questionnaire is to clear students' perceptions of whether they have skills that employers think they need more and do not exist in their employees. Students; think they have a high level of "o" *"physical and physical competence, ability to work in teams, work ethics, problem-solving and taking responsibility"*. "They stated that they have medium-high-level skills of "i" *"rhetoric and diction"* ."They stated they have medium-level skills such "a" *"sales management and marketing, entrepreneurship, advertising, social media management, and project-based work "* ."They think they have" *"basic computer skills, advanced computer skills, and foreign language"* *skills at a low level.*

As a result of the analysis made, vocational education students think that employers have most of the skills they want, but employers think students do not have these skills. In this case, either the employers do not consider the skills of the vocational high school graduates to be sufficient, or the employees who are vocational high school graduates cannot adequately show their skills to the employers. Like the employees' results, the perception mismatch here can also make the programs and implementation efforts to eliminate the skill deficiencies inefficient.

According to the findings obtained from the Triple Likert scale regarding the expectations of the students participating in the research on vocational education, the students think that the education they have received meets their expectations at a limited level while 57.8% of them highly agree that vocational education is important in finding a job. As an extension of this result, when the students were asked whether their schools' physical education equipment is sufficient, only 24.7% stated that it was highly sufficient. In comparison, 55.9% gave a limited enough answer. This result confirms the insufficiency of physical capacity within the institutional capacity dimensions of vocational high schools.

The issue frequently emphasized in the literature and policy documents (e.g. 11th Development Plan) regarding vocational education is related to the insufficiency of the implementation dimension (Ulus, et al. 2015; Pillay et al. 2014; Lillis, and Hogan, 1983). Research results also support this inadequacy. For example, 21.8% of the students stated that the application dimension of their education was insufficient, and 52.3% stated that it was at a limited level. Approximately one-fourth think it is sufficient (25.6%).

Another important finding is related the students' intentions regarding the frequency of job change. In the qualitative part of the research, among the factors that shape the employers' negative perceptions towards the workforce are high turnover rates and the tendency of young workforce to change their jobs frequently. However, this determination does not coincide with the intentions of the students who receive vocational training within the scope of the research. Often, vocational high school students' intention to change jobs is not so high as stated by their employers. It can be explained by the change in the perceptions of different generations on working life, and it also shows that students' intentions can change as they get a start in working life actively.

CONCLUSION

In this research, three questions were asked and tried to be answered:

- What is the reason for vocational education-employment mismatch despite all efforts?

- Why is the desired success not achieved despite the studies and arrangements made for vocational training?

- Is making vocational and technical education more qualified enough to achieve the targeted adaptation?

As a result of all findings;

Despite all the efforts, it is understood that vocational education-employment incompatibility is the simultaneous and dynamic incompatibility of the education and employment relationship.

Despite many studies and arrangements for vocational training, the desired success cannot be achieved quickly and effectively due to the inadequacies in meeting regional and current needs.

It has been observed that making vocational and technical education over-qualified is not sufficient to achieve targeted compliance. The experience of a private vocational high school established in the region has also shown that making the education more qualified than the need, besides meeting the demand for intermediate staff due to the excessive education trap, turns it into a step that prepares students for qualified universities. In vocational training, it is understood that the education system should be established by taking both the employers' demands and the students' opinions. Apart from this, it has been revealed from the statements of students and employees that employers have incorrect or incomplete information about students at schools and those in employment.

As a result, it is understood that young people cannot get adapted effectively to the labour market with the current vocational education system within the scope of the research.

DISCUSSION AND RECOMMENDATIONS

As a result of the research, it is understood that although there is an apparent disagreement in labour market actors, the parties always perceive the reason for this incompatibility as external. The ease of looking at the problem externally makes the solution difficult and increases incompatibility.

The usual expectation that education still maintains its importance but does not meet market needs was reaffirmed in this study. Both employers, employees, and students who have not yet entered working life require flexible and practical vocational training centres to be established in the region.

The World Economic Forum (WEF) Future Jobs 2020 Report; emphasizes that by 2025, 85 million jobs could move between people and machines, and 97 million new jobs could emerge that require unique skill needs. The report also stated that 94% of employers expect their employees to gain new skills in their careers, and about 40% of them estimate that their employees will need new skills in six months or less to stay in employment (WEF, 2020) (According to the report published in 2018, the rate of employers who said that their employees needed to acquire new skills was 65%!). As a result of the research conducted in the region, it has been observed that it is challenging to create new jobs and combat the deficiencies in the labour market adjustment process while the labour force qualification needs for existing jobs cannot be met. This situation strengthens the prediction that the region will remain weak in the national and global competitive power in the future.

Although the students of the region think vocational education is essential in finding a job, employment problems arise due to the training that does not comply with the market requirements and the lack of experience. 88% of students answered positively to the question whether or not they would study if there were a vocational education/certification centre outside the school to improve their skills. Employed persons gave 80% positive answers to the same question. Both students and those in employment need a supportive education centre. While there are well-established institutional organizations such as vocational high schools, it is clear that people need for new training centres is not due to the inadequacy of educational opportunities but from the ineffectiveness of existing practices. It is easy to externalize the problem by attributing the ineffectiveness to the management of

vocational high schools or the quality of their teachers. However, as a result of our visits, it has been seen that many vocational high schools in the region have pretty good administrations and a young and dynamic teaching staff that have not yet lost their enthusiasm. However, the fact that the curriculum does not have sufficient flexibility in the face of current developments and that teachers are not given sufficient authority/responsibility and value other than teaching a certain curriculum can be cited as the reasons for the decline of the system. In order to harmonize vocational education and labour market needs, a wide area should be structured to save teachers from the static structure. During our research, we found that enthusiastic teachers working alongside bored teachers of similar ages felt that nothing could be done anymore. Bored teachers can outperform passionate teachers in their arguments because they receive the same wages, are less tired, and have more time for themselves than their students. Some enthusiastic teachers have not given up the struggle because of their personalities and ideas and continue to strive. However, it can be easily seen that the strength and motivation of most of them are rapidly exhausted. Corrections and improvements in the education system must be handled regarding human values. Within the framework of the results we have reached within the scope of this research, all of our technical suggestions for improving vocational training include improving human values in the infrastructure. Otherwise, no effort or institutional arrangement will succeed.

Suppose it is both costly and challenging to make the curriculum flexible. In that case, this need can be met quickly by establishing vocational training centres with a flexible curriculum at the local level. By means of the communication offices established in vocational training centres, current needs can be determined by continuously exchanging information with employers and their representatives. While the theoretical training that will meet the needs is delivered to students remotely (online), practical training can be carried out at the workplace of the interested employer or can be carried out as a simulation within the scope of three-dimensional applications (these applications are now easier and less costly than before. All working principles of the machine with three-dimensional applications, sections, etc., can be shown in total). Another sub-question asked to those who wanted to establish such a center within the scope of the research was about the method of providing education. Although the participants did not find the distance education

provided over the internet during the Covid-19 period sufficient, they found it valuable in critical situations by this result. Considering the future professional flexibility, speed and distance education are necessary for gaining different competencies. In this context, in addition to face-to-face training in vocational training/ certificate centres, distance education systems must also be included.

Our talented and enthusiastic teachers working in our current vocational high schools can be assigned to these centres. In this way, it may be possible to differentiate people with low added value from those with high. Suppose postings are subject to additional prestige and pay. In that case, they can support the motivation of talented people (in a broken system, there is a risk of employing incompetent teachers to receive additional wages from the centres. However, it is assumed that such nepotic assignments will decrease as the proposed centres will control employers doing business in the market).

Research results have shown that central policies for labour market adaptation in the least developed region of a developing country do not meet the needs. In this context, it can be said that there is a need for a complementary system with a flexible curriculum that will meet the vocational education expectations needed in the region, which is practical (the application dimension of the training is provided in the workplaces) and supported by distance education.

These results are consistent with similar studies in the literature. A one-size-fits-all approach might not be able to adequately handle regional variations in labor market challenges (Koisová et al., 2018). The requirements of the local population are frequently not met by central labor market adaption policies in the least developed areas of developing countries (Blien et al., 2010). This emphasizes the significance of putting in place a supplementary system that fixes the weaknesses in the central policy. One such method might be a flexible curriculum that meets expectations for vocational education and prioritizes hands-on training in actual-life scenarios (Mongkhonvanit, 2017).

REFERENCES

Aksu, M. B., (1996). İnsan İlişkilerinde Bir Boyut: Grup Davranisi. Kuram ve Uygulamada Eğitim Yönetimi, 3, pp. 315-328.

Becker, G. (1993). Human Capital. The University of Chicago Press.

Blien, U., Hirschenauer, F., & Thi Hong Van, P. (2010). Classification of regional labour markets for purposes of labour market policy. *Papers in Regional Science*, *89*(4), 859-880.

European Centre for the Development of Vocational Training (Cedefop). European Training Thesaurus, [online] Available at: http://www.cedefop.europa.eu/ EN/publications/20031.aspx. [Accessed in December 2020].

Çelikkaya, S., Yaman, H., Dağlı, İ., & Çapık, E. (2018). Bölgesel Politikaların Kalkınma Planlarındaki Yeri ve Zamana Bağlı Dönüşümü. *Süleyman Demirel Üniversitesi Vizyoner Dergisi*, *9*(22), 21-31.

Creswell, J. W., & Clark, V. L. P. (2017). *Designing and conducting mixed methods research*. Sage publications.

DAKA (2018). TRB2 Bölgesi Eğitim İhtiyaç Analiz Raporu, [online] Available at: https://www.daka.org.tr/panel/ files/files/yayinlar/TRB2%20BÖLGESİ%20EĞİTİM%20 İHTİYAÇ%20ANALİZİ%20RAPORU.pdf [Accessed in August 2022].

Ferrari, C., Merk, O., Bottasso, A., Conti, M., & Tei, A. (2012). Ports and regional development: A European perspective.

Gönüllü, M. (2001). Grup ve Grup Yapısı. C.U. İktisadi ve İdari Bilimler Dergisi, 1, pp. 191-201.

Hansen, N. (1990). Innovative Regional Milieux, Small Firms, and Regional Development: Evidence from Mediterranean France. The Annals of Regional Science, 24, pp.107-123.

Hill, H. (1998). The Challenge of Regional Development in Indonesia. Australian Journal of International Affairs, 1, pp.19-34.

Hirschman, A.O. (1958). The Strategy of Economic Development, Yale University Press: USA.

Hummelbrunner, R. and Lukesch, R. (2008). Systemic Instrument for Regional Development, [online] Available at: http://www.wiram.de/toolkit/ Downloads/Systemic Instruments.doc. [Accessed in August 2021].

Illeris, S. (1993). An Inductive Theory of Regional Development. Papers in Regional Science, 2, pp.113-134.

Kanbur, R. and Svejnar, J. (2009). Labour Markets and Economic Development, Routledge.

Karataş, M. and Çankaya, E. (2010). İktisadi Kalkınma Sürecinde Beşeri Sermayeye İlişkin Bir İnceleme. Mehmet Akif Ersoy Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, 3, pp. 29-55.

Koisova, E., Masarova, J., & Habanik, J. (2018). Regional differences in the labour market in Slovakia and the Czech Republic. *Journal of Competitiveness*, *10*(2), 104.

Lang, T. and Görmar, F. (2019). Regional and Local Development in Times of Polarisation Re-thinking Spatial Policies in Europe. Palgrave McMillan.

Lillis, K., & Hogan, D. (1983). Dilemmas of diversification: problems associated with vocational education in developing countries. *Comparative education*, *19*(1), 89-107.

Mongkhonvanit, J. (2017). Thailand's dual education system: a way forward. *Higher Education, Skills and Work-Based Learning*, *7*(2), 155-167.

Frédéric, L., and Daviet, S. (2010). Cultural Economy: An Opportunity to Boost Employment and Regional Development?. Regional Studies, 44, pp. 807-811.

Milli Eğitim Bakanlığı, Milli Eğitim İstatistikleri 2019/'20, [online] Available at:, http://sgb.meb.gov.tr/www/ icerik_goruntule.php?KNO=396. [Accessed in September 2021].

Myrdal, G. (1971). Economic Theory and Underdeveloped Regions. Harper&Row Publishing.

OECD. 2017. Employment and Skills Strategies in Turkey. [online] Available at:, https://www.oecd.org/ turkey/employment-and-skills-strategies-in-turkey-9789264279506-en.htm. [Accessed in September 2021].

Pike, A. and etc. 2010. Handbook of Local and Regional Development. Routledge.

Pillay, H., Watters, J. J., Hoff, L., & Flynn, M. (2014). Dimensions of effectiveness and efficiency: a case study on industry–school partnerships. *Journal of Vocational Education & Training*, *66*(4), 537-553.

Rees, G. (2006). Vocational Education and Training and Regional Development: An Analytical Framework. Journal of Education and Work, 2, pp.141-149.

Saunders, M. and etc. 2019. Understanding Research Philosophy and Approaches to Theory Development. Research Methods for Business Students. Pearson Education Press, pp. 128-171.

T.C. Cumhurbaskanligi Strateji ve Bütçe Başkanlığı, 11.Kalkınma Planı (2019-2023), Temmuz 2019, [online] Available at:, https://www.sbb.gov.tr/wp-content/uploads/2019/07/OnbirinciKalkinmaPlani.pdf. [Accessed in September 2021].

T.C. Kalkınma Bakanlığı. 2018. 11.Kalkınma Planı Mesleki Eğitimde Niteliğin Artırılması Çalışma Grubu Raporu, [online] Available at:, https://www.sbb.gov.tr/wp-content/uploads/2020/04/MeslekiEgitimde NiteliginArtirilmasiCalismaGrubuRaporu.pdf[Accessed in September 2021].

Ulus, L., Tuncer, N., & Sözen, Ş. (2015). Mesleki eğitim, gelişim ve yeterlilik açısından meslek yüksekokullarının önemi. *Uluslararası Türk Eğitim Bilimleri Dergisi*, *2015*(5), 168-185.

United Nations (UN). 2020. The Future We Want The United Nations We Need, [online] Available at:, https://www.un.org/sites/un2.un.org/files/un75report_september_final_english.pdf. [Accessed in August 2021].

World Economic Forum. 2020. The Future of Jobs Report. http://www3.weforum.org/docs/WEF_Future_of_Jobs_2020.pdf. [Accessed in September 2021].

Yükseköğretim Kurumu (YÖK). 2020. Geleceğin Meslekleri Çalışmaları, [online] Available at:, https://www.yok.gov.tr/Documents/Yayinlar/Yayinlarimiz/2019/gelecegin_meslekleri_calismalari.pdf [Accessed in June 2021].