



**7th International Conference on Business and  
Economics Studies (ICBES) 2021**

**Hosted by Erzurum Technical University Blackboard**

**4 - 5 September 2021, Erzurum, TURKEY**

# CONFERENCE PROCEEDINGS

ISSN 2469-7540

**CO-EDITORS**

Ahmet İlker Akbaba, PhD

Harun Can, Res. Asst.

Rıdvan Akın, Res. Asst.

### **Organizing Committee**

Dr. Ahmet İlker Akbaba, ETUSEM, Chair  
Dr. Mehmet Akif Gözitok, ETUSEM  
Dr. İkrâm Yusuf Yarbaşı, ETUSEM  
Dr. Abdulkadir Kaya, Erzurum Technical University  
Dr. Gürkan Çalmaşur, Erzurum Technical University  
Dr. Fatih Yıldırım, Erzurum Technical University  
Dr. Zeynep Karaca, Erzurum Technical University  
Dr. Mehmet Emirhan Kula, Erzurum Technical University  
Dr. Burak Başkan, Erzurum Technical University

### **Secretary**

Dr. Muhammed Şamil Şık, Erzurum Technical University  
Res. Asst. Muhammet Mutlu, Erzurum Technical University  
Res. Asst. Sefa Özdemir, Erzurum Technical University  
Res. Asst. Rıdvan Akın, Erzurum Technical University  
Res. Asst. Harun Can, Erzurum Technical University

### **Scientific Committee**

Dr. Murat Taş, Texas Health & Science University  
Dr. Fayq Al Akayleh, Al Yamamah University  
Dr. Patricia Watkins, Texas A&M University  
Dr. Kongkiti Phusavat, Kasetsart University  
Dr. Thomas Philip Corbin, Jr., American University in Dubai  
Dr. İbrahim Al Saadi, King Abdulaziz University  
Dr. Russel Blair Williams, Zayed University  
Dr. Satyanarayana Ayinagadda, Midwestern State University  
Dr. Jiansheng Chen, Peking University  
Dr. Natasa Slak Valek, Zayed University  
Dr. Kasai Minobu, Hirosaki University  
Dr. Burchan Aydin, Texas A&M, Commerce  
Dr. Mahmud Yusuf, San Antonio College  
Dr. Taqadus Bashir, Bahria University  
Dr. İlhami Yücel, Erzincan Binali Yıldırım University  
Dr. Ömer Yılmaz, Ataturk University  
Dr. Osman Demirdöğen, East Anatolia Project Regional Development Administration  
Dr. M. Suphi Özçomak, Ataturk University  
Dr. Serap Bedir Kara, Erzurum Technical University  
Dr. Ali Kemal Çelik, Ardahan University  
Dr. Bener Güngör, Atatürk University  
Dr. Muammer Zerenler, Selçuk University  
Dr. Abdullah Naralan, Recep Tayyip Erdoğan University  
Dr. Ramazan Yanık, Iğdır University  
Dr. Miraç Eren, On Dokuz Mayıs University  
Dr. Murat Serçemeli, Giresun University  
Dr. Orhan Küçük, Sakarya Applied Sciences University  
Dr. Abdulkadir Özdemir, Bandırma Onyediy Eylül University  
Dr. Esra Sena Türko, Erzurum Technical University

Dr. İbrahim Halil Ekşi, Gaziantep University  
Dr. Ender Coşkun, Pamukkale University  
Dr. Gülizar Kurt Gümüş, Dokuz Eylül University  
Dr. Nuraydın Topçu, Yalova University  
Dr. Ahmet Kamil Kabakuş, Atatürk University  
Dr. Gülşen Kırpık, Adıyaman University  
Dr. Mustafa Emir Yücel, Bartın University  
Dr. Musa Ünalın, Fırat University  
Dr. Hakan Kahyaoğlu, Dokuz Eylül University  
Dr. Ramazan Ekinci, Bakırçay University  
Dr. Gülden Poyraz, Bandırma Onyedı Eylul University  
Dr. Atakan Durmaz, Samsun University  
Dr. Şaduman Yıldız, Bayburt University  
Dr. İbrahim Orkun Oral, Bilecik Şeyh Edebali University  
Dr. Ömer Alkan, Atatürk University  
Dr. Seyedhadi Eslamian Shiraz, University College of Nabi Akram  
Dr. Ali Sattary, University College of Nabi Akram  
Dr. Abdulkerim Karaaslan, Atatürk University  
Dr. Elif Çolakoglu, Ministry of Interior Gendermerie And Coast Guard Academy  
Dr. Serdar Pirtini, Marmara University  
Dr. Alper Özer, Ankara University  
Dr. Hakan Eygü, Atatürk University  
Dr. Murat Baş, Erzincan Binali Yıldırım University  
Dr. Burak Erkayman, Atatürk University

 **The papers were scientifically reviewed.**

## **PREFACE**

The complexities surrounding the globalization and the interconnectedness of nations are creating challenges for nation-states as well as other newly formed political structures. Innovative social, political, and economic structures are being formed and existing structures are being re-formed to adapt to these challenges. This conference brought experts from around the world to share their research and experiences in social sciences, business and economics, technology, and more.

The conference proceedings present some of our scholarly discussions that took place. We hope these scholarly conversations continue to inform each other and facilitate our understanding of the complex world we live in.

## THE GREEN DEAL AND SUPPLY CHAIN

by Serdar Hasan Aydoğan, Gaziantep University, [serdaraydogan@gaib.org.tr](mailto:serdaraydogan@gaib.org.tr); Hanifi Murat Mutlu, Gaziantep University, [mmutlu@gantep.edu.tr](mailto:mmutlu@gantep.edu.tr)

**Abstract:** The growth of international supply chains undoubtedly brings enormous benefits to developing countries, but it has also had some negative impacts on human and labor rights violations, including forced and child labour, environmental damage, corruption, land grab. Multinational corporations have gained unprecedented power by creating asymmetries in developing countries due to weak regulation and sanctions. For several decades, multinational companies have been encouraged to voluntarily take responsibility for their supply chains. In some sectors where violations are common, especially in the mining or timber industries, mandatory EU-level frameworks have already been adopted, while for others it is hoped that a voluntary approach guided by the various international frameworks will suffice. The European Commission has taken some preliminary steps, including publishing a study and public consultations for a possible legislative initiative on mandatory due diligence. The 2021 work program includes a proposal for a directive on sustainable corporate governance, which will also include human rights and environmental due diligence. The European Green Deal is committed to unifying all EU actions and policies under environmental objectives and using their synergies. It addresses the need to avoid the transfer of harmful environmental impacts of certain industries outside EU borders. The Green Deal focuses on people and sustainability. The Green Deal is an integral part of the EU's efforts to implement the United Nations' sustainable development goals. Human rights and due diligence can be important and effective tools to achieve these goals. The Green Deal outlines the Commission's commitment to transforming global value chains by promoting new standards for sustainable growth.

**Keywords:** Supply chain, sustainable development goals, green deal.

## A JOURNEY FROM TRADITIONAL ENTREPRENEURSHIP TO SOCIAL ENTREPRENEURSHIP FROM PAST TO PRESENT

by Yasemin Karabulut, Atılım University, [yasemin2906@gmail.com](mailto:yasemin2906@gmail.com)

**Abstract:** Developments in many fields such as economy, transportation, health, science and technology all over the world have brought different perspectives to the concept of entrepreneurship, the definition of which dates back to 1755. In the light of these developments, the concept of entrepreneurship, whose importance is increasing all over the world and whose profit and benefit is now evolving from businesses to society, has also revealed many different new concepts such as start-up, spinoff and social entrepreneurship. In Turkey, there has been an increase in the number of social entrepreneurs who carry out their activities in the field of social responsibility and take initiatives for the needs and expectations of the society in recent years, also social entrepreneurship has come to the fore. In this research, firstly the traditional entrepreneurship concept from past to present and the development processes of entrepreneurship in Turkey has been examined, secondly the contribution of entrepreneurship to the global economy, the concept of social entrepreneurship, the development process of social entrepreneurship in Turkey, activities carried out in the field of social entrepreneurship, the problems and solutions in social entrepreneurship and their solutions has been mentioned. Finally, the contribution of social entrepreneurship to the Turkish economy has been evaluated based on the literature. In the research conducted with a qualitative approach, the literature was scanned with the document analysis method and qualitative data directly related to the subject of social entrepreneurship has been obtained. The data obtained are classified, interpreted and it has concluded that social entrepreneurship, which sees the human as a whole and sets goals according to their needs, will be the priority area of the future. In addition, the results of social entrepreneurship, which includes many areas such as strengthening the economic structure, integration of social structure, reducing social problems, and equal distribution of national income, come to the fore. It has been determined that social entrepreneurship is a rising trend in Turkey, while supporting entrepreneurs, the social aspect of the enterprise is examined and social entrepreneurship is supported. Based on these results, it can be suggested to entrepreneurs and supporting institutions that they should consider social enterprise in a multi-faceted manner.

**Keywords:** Entrepreneurship, Social entrepreneurship, History of entrepreneurship, Development process of social entrepreneurship.

## DEVELOPMENT CULTURE AND ITS IMPORTANCE FOR ORGANIZATIONS

by Nagehan Öner, Atatürk University, [kasilng@yahoo.com](mailto:kasilng@yahoo.com)

**Abstract:** Organizational culture is a set of unwritten rules consisting of values, beliefs, norms, symbols and ways of doing business that are shared and maintained by employees in an organization. The culture of an organization is almost a representative of the corporate identity of the organization, with its feature of being an element that shows its difference against its competitors. Organizational culture, which has been the subject of many researches from the past to the present and has been examined with different classifications by various scientists, has been discussed in four sub-dimensions as hierarchical culture, group culture, rational culture and developmental culture in the classification made by Quinn and Spreitzer (1991). The culture of development, which is the subject of this study, emerges as an important subculture that covers external-focused issues such as innovation, creativity, flexibility, which allows the organization as a whole to adapt to changing environmental conditions, to be ahead of its competitors and even to be a pioneer in competition and to grow. Flexible organizational structures that adopt the culture of development are organizational structures that are open to change, learning and development in search of new information, where employees are encouraged and encouraged to make innovative decisions instead of resisting change, and increasing employee motivation is at the forefront. In addition, there is the use of open communication channels due to acquiring new information and disseminating information throughout the organization. Rewarding rather than punishment is common in such organizations that involve the development of employees' strengths, and emphasis is placed on personal development of employees, thus creating a positive culture. It can be said that risk taking and therefore uncertainty prevail in structures where this type of culture is common. However, such situations can be turned into opportunities by innovative, visionary leaders and enthusiastic, participatory employees who like to cope with challenges and take risks, who give opportunities for employees to develop. For example, Boeing worked at the same performance level for years, but saw the need for improvement and change and realized that it needed to make changes in its business model. As a result, it took the lead as the world's largest aircraft manufacturing company. Like Boeing, Apple, General Motors, PwC, Siemens, Domino's are among the innovative companies that support development and change. As a result, organizations need to give importance to employee development, learning, change and innovation constantly in order to maintain their existence, realize their vision, gain superiority in competition by getting rid of the follower company feature and adapt to changing conditions.

Successful change and innovation activities to be carried out in a sustainable competitive environment shed light on the future of organizations and allow them to grow at increasing rates.

**Keywords:** Organizational culture, Development culture, Innovation.

## COVID-19 AND NOSTALGIC FEELINGS OF EMPLOYEES

by Mehmet Ali Türkmenoğlu, Muş Alparslan University, [m.turkmenoglu@alparslan.edu.tr](mailto:m.turkmenoglu@alparslan.edu.tr)

**Abstract:** The Corona Virus Disease, known as Covid-19, is an infectious disease that caused over four million deaths around the globe. Covid-19 has become one of the most devastating pandemics in history. This major outbreak, which emerged in China in late 2019, has generated numerous challenges in many areas of daily life. Since its appearance, we have experienced several restrictions to reduce infection rates, including lockdowns, quarantines, furloughs, and working remotely. Unavoidably, this pandemic has negatively affected workplaces; in particular, it has changed the way how work is carried out comparing to the pre-pandemic era. Since there was not any medicine available to overcome Covid-19, office employees were instructed to work from home to avoid catching the virus. Most of the office employees have been working remotely for more than a year, which has created changes in their working lives. This often led employees to yearn for their workplaces. Feeling love and longing for past experiences in respect to work-life is described as organizational nostalgia. Therefore, this research aimed at examining how the Covid-19 pandemic impacted office employees' organizational nostalgia. A qualitative approach was adopted to reveal employees' nostalgic feelings regarding their past work lives. Five semi-structured interviews were conducted to fulfill the purpose of the study. The findings suggested that employees working in offices long for face-to-face conversations before social distancing, interacting with colleagues, having food/drink together, celebrating important days such as birthdays before Covid-19. The participants also reported that they feel nostalgic about their daily routines of work before the pandemic. Some of the participants state that they miss their working environments, including their desks and even the odor of the workplace. Since this research tried to grasp the impact of Covid-19 on employees' nostalgic feelings, future research can explore more by using quantitative methods to test if organizational nostalgia affected employees' work-related outcomes.

**Keywords:** Covid-19, Organizational nostalgia, Qualitative research.

## **SUSTAINABLE SUPPLY CHAIN AND OPTIMAL SUPPLIER SELECTION IN THE TEXTILE INDUSTRY WITH AHP-TOPSIS METHOD**

by İbrahim Tekin, Gaziantep University, [tekin2783@gmail.com](mailto:tekin2783@gmail.com); Hanifi Murat Mutlu, Gaziantep University, [mmutlu@gantep.edu.tr](mailto:mmutlu@gantep.edu.tr)

**Abstract:** Introduction and Purpose Today as in every field, the importance of sustainability is understood in production process and the sustainability of the activities carried out from the producer to the final consumer is among the strategic goals of the enterprises. The fact that success in supply chain is essential for company success, brings up the sustainability of this chain, it is now accepted by the majority of society that an unsustainable supply chain cannot be economical and it cannot agree with environment problems. The concept of sustainability refers to the ability to continue the existence of resources that are available in nature in limited quantities and to transfer them to future generations in the same way in the balance of production and consumption. Sustainability has begun to make its importance felt in the business life as well. The economic use of resources in production activities, the awareness of controlling the damage to the environment as a result of activities, and the awareness of social responsibilities to society have formed the basis of a sustainable supply chain. In our study, firstly, by giving information about the sustainable supply chain the importance of the subject was mentioned, and then the selection of the supplier in the procurement stage, which is considered the most important stage of the supply chain, was explained in practice. By using AHS (Analytical Hierarchy Process) and TOPSIS (The Technique for Order of Preference by Similarity to Ideal Solution) methods in supplier selection, the effectiveness of these methods in supplier selection was evaluated. The criteria determined by exchanging opinions from experts in the textile sector were applied to these methods. Analytical Hierarchy Process (AHP) is one of the multi-criteria decision making techniques developed by Thomas L. Saaty in 1977. Technique for Order Preference by Similarity to Ideal Solution (TOPSIS) approach is a decision making method developed by Cheng and Hwang (1992) based on the studies of Yoon and Hwang (1981)(Opricovic ve Tzeng, 2004:448). The main purpose of the method is to determine the decision option closest to the positive ideal solution and the farthest distance from the negative ideal solution. Literature Analysis There are many studies conducted in the context of sustainable supply chain. Most of the researchers examined sustainability in the supply chain from different aspects such as product design, material purchasing, supplier selection, manufacturing, reverse supply chain, and waste management. The case study approach is

frequently used in studies using qualitative methods, while statistical analysis of primary data or archival data is usually performed in quantitative studies. It has been observed that a satisfactory number of studies have been carried out on supplier selection in Turkey. According to the bibliometric analysis study of Ş.Ekinci, K. Roof and A. Savaşkan (2021), which includes the thesis studies on the subject between 1997-2020, there are 114 studies in which multi-criteria decision making (MCDM) methods are used. 98 of these thesis studies were done at master's level and 16 of them were at doctorate level, and the 5 most used criteria in the techniques included in the thesis studies on supplier selection were determined as quality, cost, timing, service and flexibility. The 5 most used techniques were determined as AHP, Fuzzy AHP, TOPSIS, Fuzzy TOPSIS and ANP. In a bibliometric analysis (G.Koca, S.Yıldırım, 2020) conducted for fuzzy multi-criteria decision making studies, studies between 2005-2019 were examined. In the study, in which a total of 2482 publications were analyzed, the findings showed that China, Taiwan, Turkey, India and Iran were active in the Fuzzy MCDM studies. On the other hand, it has been determined that the most scientific studies on this subject are articles. Method In this study, first of all, information about the sustainable supply chain is given and the importance of the subject is mentioned. At this stage, previous scientific studies and the strategies implemented by the companies were used as a source. In the second stage, AHP and TOPSIS methods were used to select the best supplier in the textile industry. The criteria selected for supplier selection in the AHP method were determined as a result of the expert opinions on this subject and the most used criteria in previous scientific studies on the subject. The first 10 of the identified criteria, in order of importance, were included in our study. The criteria determined within the scope of our study are as follows: SUPPLIER SELECTION CRITERIA □ Trust □ Cost □ Supply Speed □ Payment Method □ Sustainability □ Market Reputation □ Quality □ Past Performance □ Willingness to work □ Location While creating the pair wise comparison matrix between the criteria in the AHP method, the opinions of people who have been operating in the sector for a long time and who are experts in their field were taken as basis for each comparison, and the average of the opinions of these people was reflected while determining the final data in the matrix. After determining the weights of the criteria with the AHP method and performing the consistency analysis, a selection was made among 5 suppliers determined by using the weights of these criteria with the TOPSIS method. Application and Findings In line with the main purpose of the study, Analytical Hierarchy Process and TOPSIS method were used for a sustainable supplier selection. The subject of the study is the selection of the most efficient and long-term sustainable supplier in accordance with the determined criteria in the supplier selection of textile companies operating in

Gaziantep. The hierarchical structure in the AHP process is established as follows: In our study, 5 alternative suppliers were determined in the TOPSIS section, and the best supplier was tried to be determined with the help of criterion weights by randomly giving various points to the suppliers within the scope of the above-mentioned criteria. Conclusion The continuity of the supply chain is possible by ensuring the sustainability of each of the supply, production, distribution and after-sales service stages in the process. In the supply chain, where each stage is individually important, the supply process stands out as a process that also affects all other stages. The most important criterion in terms of timely supply of a good with low cost and high quality under appropriate conditions is the supplier. In this context, supplier selection should be considered as one of the most important stages in ensuring a sustainable supply chain. It was seen that the criteria with the highest weight coefficient among the criteria selected during the implementation phase of the study were "trust" in the 1st row, "cost" in the 2nd, and "payment method" in the 3rd row. It has been determined that the least important criteria in this ranking are the "position" and "willingness to work" of the supplier company. The "sustainability" criterion, which we mentioned in the theoretical part of our study and which includes the concepts of social responsibility, environmental awareness and economy, was in the middle in the order of importance. As a result of the TOPSIS method applied, it was seen that the most preferred supplier was Company B operating in the country. It is seen that Company B has an average performance compared to other companies in terms of cost and location, but stands out in terms of trust and supply speed with high weight coefficients. However, despite these, it could not be the preferred company as it fell behind in the trust criterion, which has the highest weighting coefficient of the criterion. Although companies D and E operating abroad had an average superiority over other companies in criteria other than cost, supply speed and location criteria, the determination of these three criteria caused companies D and E to fall into the last place in the selection. Company A was the second most preferred supplier after company B.

**Keywords:** Sustainable supply chain, Analytical hierarchy process, Topsis.

## **DETERMINANTS OF TRANSPORTATION EXPENDITURES: THE CASE OF TURKISH HOUSEHOLD**

by Kübranur Çebi Karaaslan, Erzurum Technical University, [kubranur.cebi@erzurum.edu.tr](mailto:kubranur.cebi@erzurum.edu.tr);  
Abdulkerim Karaaslan, Atatürk University, [akkaraaslan@atauni.edu.tr](mailto:akkaraaslan@atauni.edu.tr)

**Abstract:** Today, the variety of transportation needs of family members, the increase in the number of working women, growing cities, the work of family members, etc. has increased at a remarkable rate. A significant portion of the total household expenditures consists of transportation expenditures. This situation has been the source of motivation for the study. The aim of this study is to determine the factors affecting the transportation expenditures of households. The data set of the study was provided by the Turkish Statistical Institute through the Household Budget Survey of 2019. The data set is representative of Turkey. 11521 household heads were included in the study. Due to the fact that there are those who do not spend on transportation among the households, censored observation has been made and the Tobit model has been used. As a result of the study, it has been determined that the factors of age, marital status, educational status, work status, household size, the number of people who continue their education in the household, income level, the number of automobiles, the number of motorcycles, saving, employment status, difficulty in accessing daily shopping services, difficulty in accessing banking services, difficulty in accessing public transportation services are effective on transportation expenditures of households. Through the study, information on the determinants of transportation expenditures, which have an important place in the household budget, was presented to decision-makers and policymakers. In this way, it is hoped that the study will benefit decision-makers in order to design urban policies that aim to improve travel conditions and increase social equality related to daily travel in a way that can respond to the increasing diversity of transportation needs of households.

**Keywords:** Transportation expenditures, Household budget survey, Tobit model, Turkey.

## THE ANALYSIS OF TURKEY'S COMPETITIVENESS AMONG E7 COUNTRIES WITH COMPARATIVE EXPORT PERFORMANCE INDEX ON THE BASIS OF SELECTED CHAPTERS

by Mustafa Kavacık, Necmettin Erbakan University, [mustafa.kavacik@erbakan.edu.tr](mailto:mustafa.kavacik@erbakan.edu.tr)

**Abstract:** This study aims to analyze the competitiveness of Turkey, which is among E7 countries, with other countries in this group in terms of some selected chapters. The Comparative Export Performance (CEP) Index developed by Donges et al. (1982) was used to measure competitiveness with these countries. The first five chapters in which Turkey has achieved the highest increase in exports in the last 10 years were selected and classified through HS (Harmonized System) codes were considered. In the comparison of these chapters, the CEP indexes were calculated using the data of 2011-2020. In this direction, the first five chapters, in which Turkey has achieved the highest rate of increase in exports in the last 10 years, are 97- Works of art, collectors pieces, and antiques, 81-Other base metals employed in metallurgy and articles thereof, 96-Miscellaneous manufactured articles (pens and brushes etc), 75-Nickel and articles thereof and 23-Residues and waste from the food industries, prepared animal fodder. According to the findings, in the 97- Works of art, collectors pieces, and antiques chapter Turkey has a higher export performance against Russia and Mexico and its export performance has also increased against Indonesia since 2016. In the 81-Other base metals employed in metallurgy and articles thereof chapter, Turkey has a better export performance against India, Indonesia and Mexico. In the 96-Miscellaneous manufactured articles (pens and brushes etc), there is a higher export performance than other countries except China. When looking at the 75-Nickel and articles thereof chapter, export performance of Turkey increased against China, India and Brazil, especially after 2016, and showed a better performance despite a changing graphic with Mexico. Also, in the 23-Residues and waste from the food industries, prepared animal fodder chapter, it can be said that although the export performance against China and Mexico has differed over the years, it has gained momentum in this process.

**Keywords:** Competitiveness, Comparative export performance (CEP) index, E7 Countries.

## **REGIONAL OVERVIEW OF CAUSES BETWEEN GROSS DOMESTIC PRODUCT, UNEMPLOYMENT, EXPORTS AND PRODUCTIVITY**

by Zeynep Karaca, Erzurum Technical University, [zeynepkaraca25@hotmail.com](mailto:zeynepkaraca25@hotmail.com); Kübra Nur Sancak, Erzurum Technical University, [kubra.sancak25@erzurum.edu.tr](mailto:kubra.sancak25@erzurum.edu.tr)

**Abstract:** In this study, it is aimed to determine the relationship between gross domestic product (GDP), unemployment, exports and productivity at the regional level. In the study, data from 26 level 2 regions covering the years 2014-2019 were used. In the econometric analysis, first of all, the stationarity analysis of the variables used in the model was performed. Granger causality analysis was used because the series were equally stationary. According to the empirical results of the model, regionally, unilateral causality from exports to unemployment and GDP; unilateral causality from unemployment to exports and productivity; it has been found that there is a bidirectional causality relationship between productivity and GDP and exports.

**Keywords:** Granger causality, Regional development, Productivity, Unemployment, Export, Growth.

## **DIGITAL FACILITATION IN THE WORKING ENVIRONMENT DURING THE PANDEMIC PERIOD**

by Ahmet İlker Akbaba, Erzurum Technical University, [aakbaba@erzurum.edu.tr](mailto:aakbaba@erzurum.edu.tr)

**Abstract:** The concept of facilitation, which we have heard often lately, can basically be explained as facilitating. This approach, which adopts the making of projects in a much easier, target-oriented and practical way in every sense, has started to be adopted by many institutions and organizations today. Facilitation, unlike traditional methods; It focuses on questions such as asking questions, organizing the discussion, highlighting the activities and ensuring that the participants learn. In this sense, it is in a sense a guide for corporate managers. Today, it is seen that facilitation techniques are adopted by many managers. Facilitation significantly improves group working, problem solving and adaptation skills. Since it focuses on group dynamics at a basic level, it can be interpreted as a contemporary method focused on institutional development that increases corporate efficiency. In this approach, concrete workshops are simultaneously combined with virtual mass media. This method, which enables new virtual collaborations to be achieved, allows people from different backgrounds to come together in a very practical way. The combination of facilitation with the digital field, which adds an important value to the collective working form, has opened the doors of a radical transformation, especially for organizations that want to produce fast and effective solutions to certain problems or who want to settle disputes easily and focus on the result. Digital facilitation, which is becoming increasingly important for both individuals and organizations, finds an important response in producing creative solutions in business life and adapting to all kinds of changes. In digital facilitation, participants interact not only around a traditional workshop, but also in all processes both before and after. In this way, it is ensured that all participants are active and effective. With the pandemic period, we frequently witness virtual meetings and online projects in business life. In this radical transformation process, it is almost impossible for organizations/institutions to remain indifferent to an approach such as digital facilitation. In this study, how digital facilitation affects the working environment during the pandemic period was examined.

**Keywords:** Digital facilitation, Working environment, Pandemic.

## THE VALIDITY OF THE ENVIRONMENTAL KUZNETS CURVE IN THE SERVICE SECTOR FOR TURKEY

by Ahmet Kadiroğlu, Bingöl University, [akadiroglu@bingol.edu.tr](mailto:akadiroglu@bingol.edu.tr)

**Abstract:** In this study, the validity of the environmental Kuznets curve (ÇKE) hypothesis regarding carbon dioxide (CO<sub>2</sub>) emissions in the service sector is examined. The analysis was applied for Turkey in the period 1960-2017. For this purpose, the long-term relationship between the share of the services sector in GDP and the variables of carbondioxide (CO<sub>2</sub>), which represents environmental degradation, was examined by the Johansen cointegration test. After cointegration was found, Fully-modified OLS (FMOLS), Dynamic OLS (DOLS) and Canonical Cointegrating Regression (CCR) tests were applied to determine to what extent and in what direction the variables affected each other. According to the findings, it was concluded that the EKC hypothesis is valid for the services sector in Turkey in the long term.

**Keywords:** EKC hypothesis, Carbondioxide emissions, Service sector, Johansen cointegration test, Turkey.

## EXAMINATION OF THE DISTRIBUTED STRUCTURE OF DEVELOPMENT INSTITUTIONS IN TURKEY: EXAMPLE OF ERZURUM PROVINCE

by Ferhat Gök, Erzurum Technical University,

**Abstract:** Turkey wanted to close the industrialization gap with the West since the last period of the Ottoman Empire from the 1930s and started to take target-oriented planned steps.

For this purpose, Turkey prepared its first Industrial Plan in 1933 and 5-year development plans in the following years. In the following years, Turkey met institutions with a development mission, and today there is more than one institution that has undertaken a development mission.

The fact that there are more than one institution draws attention to the existence of repetitive plans, strategy documents and support programs, as well as creating a dispersed bureaucratic structure.

The capacity of institutions and individuals to update themselves and restructure according to conditions gains importance in a world where competition conditions are increasing.

Again, due to the current competitive conditions and climate change, which has begun to be seen more and more adversely at the global level, it is of great importance to use resources efficiently, effectively and only when necessary. Both conditions necessitate strong and continuous coordination, simplified processes and accurate and effective planning in resources.

As for the determinations above, It examines whether the multitude and scattered structure of institutions with a development mission in our country is beneficial or not for our country, and whether it causes problems and disruptions or not.

Qualitative research method was preferred in the study and a broad observation-based evaluation was made beforehand. In addition to a comprehensive literature review, a wide legislative review covering institutions with a development mission and the current plans and strategy documents of the relevant institutions were examined.

Both literature review and legislation review reveal that there is an important need to combine institutions with a development mission, support programs and planning process in a single

structure. It is essential that this single structure be addressed in a regional development conference that focuses on this issue. This conference can be held under the name of “Turkey Regional Development Conference in the Light of 12 Years of Development Experience of Development Agencies”. It would be meaningful for the Eastern Anatolian Development Agency to host such a conference, which covers the provinces of the DAKAP Program, which hosts Turkey's first regional development program.

**Key words:** Development, Coordination, Efficiency.

## IMPACT OF COVID-19 PANDEMIC PROCESS THE NUMBERS OF CUSTOMERS OF DIGITAL BANKING TRANSACTIONS: THE CASE OF TURKEY

by Yağız Can Bayhan, Sivas Cumhuriyet University, [yagiz@cumhuriyet.edu.tr](mailto:yagiz@cumhuriyet.edu.tr); Hakan Eygü, Atatürk University, [hakaneygu@atauni.edu.tr](mailto:hakaneygu@atauni.edu.tr)

**Özet:** Teknolojinin gelişmesi ile bankaların farklı hizmet sunmaları, müşterinin banka tercihi bakımından önemlidir. Bankaların mobil bankacılık, internet bankacılığı, ATM bankacılığı ve telefon bankacılığı gibi hizmetlerini ön plana çıkardığı görülmektedir. Covid-19 sürecinde dijital bankacılık uygulamalarına etkisi önem arz etmektedir. Bu bağlamda 2019-2020 dönemine ait işlem hacimleri ve müşteri sayılarının incelenmesi amacıyla Türk Bankalar Birliği (TBB) resmî web sitesi ve Bankalararası Kart Merkezinin yayınlamış olduğu bilgilerden yararlanılmıştır. Araştırmada elde edilen veriler doğrultusunda, bankaların dijital hizmetleri olan internet, mobil, ATM ve telefon bankacılığında işlem hacimleri ve müşteri sayıları arasındaki ilişki ekonometrik olarak incelenmiştir. Elde edilen sonuçlara göre bankaların, müşterilerin taleplerini göz önünde bulundurmuşlardır. Bu doğrultuda müşteri sayılarında da artış olduğu belirlenmiştir.

**Anahtar kelimeler:** Dijital bankacılık, Banka performansı, Pandemi süreci, Augmented dickey-fuller testi, PP birim kök testi

**Abstract:** Emerging technological developments require banks to go into service differentiation. It is seen that banks give priority to their services such as mobile banking, internet banking, ATM banking and telephone banking. The impact on digital banking applications in the Covid-19 process is important. In this study, it was aimed to examine the changes in the digital services of banks, which are more advanced in digitalization than other sectors, and the effect of the pandemic on the use of digital banking products/services was tried to be explained. In this direction, the information published by the Turkish Banks Association (TBB) official website and the Interbank Card Center in order to examine the transaction volumes and the number of customers in internet, mobile, ATM and telephone banking, which are the digital services of banks in the pre- and post-pandemic 2019-2020 periods, were handled in the form of tables. changes were tried to be interpreted. In line with the data obtained in the research, the relationship between the transaction volumes and the number of customers in internet, mobile, ATM and telephone banking, which are the digital services of banks, has been examined econometrically. According to the results obtained, banks have taken into account the demands of their customers. As a result of econometric studies, a cointegration relationship

between the number of customers and selected variables and statistically significant linear longterm parameters have been achieved.

**Keywords:** Digital banking, Banking performance, Pandemic process, Augmented dickey-fuller test, PP test unit root.

## **Introduction**

The banking sector is growing day by day. In this context, banks continue to offer new service areas by using all the possibilities of technology. Modern banking activities were initially carried out in large centers. Moreover, with the advancement of technological developments, it was adapted to this development in banking transactions.

Digital banking, including internet and mobile banking, can be considered as one of the most important developments in the distribution channels of the banking industry. While the use of technology is becoming important for banks, they have started to use new methods and technologies to provide services to their customers. Some of these services until reaching mobile technologies include automatic teller machines (ATM), credit cards, telephone banking and internet banking. Internet banking ensures that banking transactions can be accessed from anywhere in the world at any time via the websites of banks. In online banking,

there is no one-to-one relationship with bank staff. The customer performs the banking transactions automatically. In this study, it was aimed to examine the changes in the digital services of banks, which are more advanced in digitalization than other sectors, and the effect of the pandemic on the use of digital banking products/services was tried to be explained. Moreover, one of Turkey's private bank's corporate customers' perceptions of mobile banking is examined. This research may also serve as a basis for studies to identify consumer approaches to solutions based on mobile applications.

## **Literature Review**

Today, banking services have made progress with the development of technology. The usage of advanced technology benefits the banks themselves as well. Sharma and Malviya (2011), stated that technology involvement in the banking sector mainly started with electronic banking in the 1980s. In the mid-1990s, internet banking started becoming widespread. Demirel (2021) results indicated that it is possible to state that the distance is important during the pandemic period and that consumers use digital banking transactions more intensively within the scope

of the curfew measures taken. Cheung and Lai (1995) also indicated analysis is used to obtain approximate finite-sample critical values for the augmented Dickey–Fuller (ADF) test. This study shows that the lag order, in addition to the sample size, can affect the finite-sample behavior of the test. Weigelt & Sarkar (2012) showed that the technological innovation stage is gradually increase for companies used outsourcing, emphasizing the importance of how to improve the efficiency increasing the effectiveness of the provision of resources out of the bank for online banking. Salisu and Adelek (2016) searched that utilize daily, weekly, and monthly data of 10-year bond yield for seventeen countries across the regions of America, Asia, and Europe. They find that the unit root test for sovereign bond yield data is better modeled in the presence of structural breaks, conditional heteroscedasticity, and time trend. Revisits the dynamics of unemployment rate for 29 OECD countries over the period of 1980–2013. The empirical results show that unemployment hysteresis hypothesis is strongly rejected, when taking into account the cross-sectional and structural break assumptions. Thus, unemployment rate is expected to return back to their natural levels without executing any costly macroeconomic [labour market policies](#) by the OECD’s governments (Khraief et al. (2020). Gokmenoglu et al. (2015) also indicated that the number of studies on causal relationship between oil price and macroeconomic variables has dramatically increased. Moreover, investigates the relationship among the oil price, inflation, GDP and industrial production for 1961 to 2012 period in the case of Turkey. Tunay et al. (2015) explored that the interaction between internet banking and bank performance is investigated by panel causality tests. Results show that a strong relationship through internet banking to the bank performance in the Euro Area countries and for the rest of the Euro Area countries are also not determined causation significantly in both directions.

## **Material and Method**

In this study, it was aimed to examine the changes in the digital services of banks, which are more advanced in digitalization than other sectors, and the effect of the pandemic on the use of digital banking products/services was tried to be explained. In this direction, the information published by the Turkish Banks Association (TBB) official website and the Interbank Card Center in order to examine the transaction volumes and the number of customers in internet, mobile, ATM and telephone banking, which are the digital services of banks in the pre- and post-pandemic 2019-2020 periods, were handled in the form of tables. changes were tried to be interpreted. Moreover, the number of customers of the banks was taken as the dependent variable. Take a naturel log to make the above equation linear,

$$\ln Y = \ln M + \alpha \ln I + \beta \ln A + \dots$$

is based on results given in.

The presence of unit root in the variables shows that the series are not stationary. Unhealthy results can be obtained because the relationship called spurious regression can occur in analyzes made with non-stationary data (Altın vd., 2018). For this reason, it should be checked whether the series belonging to the data sets consisting of time series are stationary. In this direction, ADF, PP and KPSS tests from unit root tests were used.

H<sub>0</sub>: The series is not stationary

H<sub>1</sub>: The series is stationary

When we have a stationary system, effect of a shock will die out gradually. Moreover, we have a non-stationary system, effect of a shock is permanent.

The Extended Dickey-Fuller (Augmented Dickey Fuller-ADF) test statistic developed by Dickey-Fuller (1981) is recommended to test the stationarity of the series.

$$\Delta X_t = \beta_0 + \beta_1 X_{t-1} + \sum_{i=1}^k \lambda_i \Delta X_{t-i} + u_t \quad (1)$$

$$\Delta X_t = \beta_0 + \beta_1 X_{t-1} + \beta_2 \text{ternd} + \sum_{i=1}^k \lambda_i \Delta X_{t-i} + u_t \quad (2)$$

In the research, Phillips and Perron unit root test was also applied in order to eliminate the deficiencies of the ADF test and to create an alternative. The hypothesis tests of the PP test are similar to the ADF.

$$y_t = \hat{\mu} + \hat{\alpha} y_{t-1} + \hat{u}_t \quad (3)$$

$$y_t = \tilde{\mu} + \tilde{\beta} \left( t - \frac{1}{2} \lambda \right) + \tilde{\alpha} y_{t-1} + \tilde{u}_t \quad (4)$$

şeklinde bulunur (Phillips ve Perron, 1988:338).

For both tests, the fact that the test statistics are larger than the critical values means that the null hypothesis for the unit root is rejected (Eygü and Demir, 2021)

## Analyses and Results

By using ADF and PP unit root tests, it was determined whether the series is stationary or not. ADF and PP unit root test results are given in Table 2. Hypotheses to show whether the series is stationary with the ADF and PP unit root tests,

H<sub>0</sub>: The series is not stationary (The unit does not contain root)

H<sub>1</sub>: The series is stationary (Units include root)

ADF and PP tests were tested with both fixed and trend models. According to the ADF and PP analysis results ( $p < 0.05$ ), it is seen that all variables are stationary.

**Table 1.** Unit Root Analysis Results

Model		ADF		PP	
		Intercept	Trend and intercept	Intercept	Trend and intercept
The number of customers	C	-0.752	-43.088	-25.711	-103.867
	CT	(0.739)	(0.001 <sup>***</sup> )	(0.001 <sup>***</sup> )	(0.001 <sup>***</sup> )
Mobil Bank	C	-45.504	-49.986	-38.284	-109.217
	CT	(0.001 <sup>***</sup> )	(0.001 <sup>***</sup> )	(0.001 <sup>***</sup> )	(0.001 <sup>***</sup> )
Internet Bank	C	-0.779	-18.361	-7.884	-44.679
	CT	(0.731)	(0.001 <sup>***</sup> )	(0.001 <sup>***</sup> )	(0.001 <sup>***</sup> )
ATM Bank	C	-10.524	-9.985	-16.328	-19.222
	CT	(0.002 <sup>***</sup> )	(0.002 <sup>***</sup> )	(0.001 <sup>***</sup> )	(0.001 <sup>***</sup> )
Telephone Bank	C	-9.978	-8.122	-22.174	--18.457
	CT	(0.001 <sup>***</sup> )	(0.005 <sup>***</sup> )	(0.001 <sup>***</sup> )	(0.001 <sup>***</sup> )

C: Fixed model, CT: Fixed and trending model, In the ADF test, the maximum number of delays is taken as 1 and the optimum number of delays was determined according to the Schwarz Criterion. <sup>\*\*\*</sup>, <sup>\*\*</sup> ve <sup>\*</sup> respective %1, %5 and %10 shows the significance levels.

In Table 1, it has been determined that all variables are stationary at the first level according to both ADF and PP unit root tests. According to the results of the unit root tests used in the

internet bank series, it was concluded that it contains a unit root at the level but is stationary at the first difference fixed and trending.

### **Conclusions**

The banking sector is among the sectors that quickly adapt technological innovations to business processes. However, the increase in costs and the changing needs of customers have directed banks to different channels such as electronic banking channels. This trend provided both banks and customers with different economic and social advantages. In this study, a member of the customers, the interactions between mobile bank, internet bank, ATM bank and telephone bank with the number of customers was investigated by unit root tests. As a result, banks should introduce these services to their consumers in more detail and include educational applications that facilitate use.

## References

- Altun, Y., İşleyen, Ş., ve Görür, Ç. (2018). Türkiye’de Eğitim ve Sağlık Harcamalarının Ekonomik Büyüme Etkisi: 1999-2017. *Sosyal Bilimler Enstitüsü Dergisi*, 39 (), 223-244.
- Cheung, Y. W., & Lai, K. S. (1995). Lag order and critical values of the augmented Dickey–Fuller test. *Journal of Business & Economic Statistics*, 13(3), 277-280.
- Demirel, S. (2021). Covid-19 Pandemi Sürecinin Dijital Bankacılık İşlemleri Üzerinde Etkisi. *Bankacılık ve Sermaye Araştırmaları Dergisi*, 5(11), 49-64.
- Dickey, D. A., Fuller, W. A. (1981). Likelihood Ratio Statistics for Autoregressive Time Series With a Unit Root. *Econometrica*, 49(4), 1057-1072.
- Eygü, H., & Demir, Y. (2021). Volatilite Endeksi (VIX) ile Ar-Ge payı, sanayi üretimi ve işsizlik ilişkisi: Türkiye üzerine ampirik bir çalışma, *İstanbul Ticaret Üniversitesi Sosyal Bilimler Dergisi*, 20(40), 487-504.
- Gokmenoglu, K., Azin, V., & Taspınar, N. (2015). The relationship between industrial production, GDP, inflation and oil price: The case of Turkey. *Procedia Economics and Finance*, 25, 497-503.
- Khraief, N., Shahbaz, M., Heshmati, A., & Azam, M. (2020). Are unemployment rates in OECD countries stationary? Evidence from univariate and panel unit root tests. *The North American Journal of Economics and Finance*, 51, 100838.
- Phillips, P. C. B. ve Perron, P. (1988). Testing for a Unit Root in Time Series Regression. *Biometrika*, 75(2), 335-346.
- Salisu, A. A., & Adeleke, A. I. (2016). Further application of Narayan and Liu (2015) unit root model for trending time series. *Economic Modelling*, 55, 305-314.
- Shahid, M. (2014). Impact of labour force participation on economic growth in Pakistan. *Journal of Economics and Sustainable Development*, 5(11), 89-93.
- Sharma, G., & Malviya, S. (2011). Exploring the Dimensions of Mobile Banking Service Quality. *Review of Business and Technology research*, 4(1), 187-196.

Tunay, K. B., Tunay, N., & Akhisar, I. (2015). Interaction between Internet banking and bank performance: The case of Europe. *Procedia-Social and Behavioral Sciences*, 195, 363-368.

Weigelt, C.,&Sarkar, M.B. (2012). Performance implications of outsourcing for technological innovations: Managing the efficiency and adaptability trade-off. *Strategic Management Journal*, 33, 189-216.

## RESEARCHING THE IMPACT OF SOCIAL MEDIA ADVERTISING ON SHOPPING

by Hakan Eygü, Atatürk University, [hakaneygu@atauni.edu.tr](mailto:hakaneygu@atauni.edu.tr)

**Özet:** Bu çalışmada üniversite öğrencilerinin çağın gereksinimlerine bağlı olarak alışveriş davranışlarında sosyal medya reklamlarının etkisini bireysel ya da sosyokültürel özelliklerine göre farklılık olup olmadığı araştırılmıştır. Bu doğrultuda Atatürk Üniversitesinde eğitim ve öğretimine devam eden üniversite öğrencilerinin sosyal medya reklamlarının alışveriş yapma üzerinde etkili olan demografik ve sosyoekonomik faktörler araştırılmıştır. Bu etkiyi belirlemek için bir anket formu oluşturulmuş, geçerlilik ve güvenilirlik analizleri yapıldıktan sonra öğrencilere uygulanmıştır. Araştırma sonucunda öğrencilerin alışveriş yapmasında sosyal medya reklamlarının etkili olduğu belirlenmiştir.

**Anahtar kelimeler:** Sosyal medya, Alışveriş, Üniversite, Lineer regresyon

**Abstract:** In this study, it was investigated whether there is a difference between the effects of social media advertisements on the shopping behaviors of university students depending on the needs of the age, according to their individual or socio-cultural characteristics. In this direction, demographic and socioeconomic factors that affect the shopping of social media advertisements of university students continuing their education and training at Atatürk University were investigated. To determine this effect, a questionnaire was created and validity and reliability analyzes were made. Linear regression method was used to analyze the data. As a result of the research, it was determined that social media ads were effective in shopping for students.

**Keywords:** Social media, Shopping, University, Linear regression

### The Significance of the Study

In this study, the effects of social media advertisements on the shopping behaviors of university students were examined. This study is rather important as it investigates whether the expectations and satisfaction of shopping differ according to individual variables (gender, age, marital status, education status, monthly income) and socio-cultural variables (nationality) for domestic customers staying in university student. It can be said that there are similar studies in the domestic and foreign literature as reference for the research

## **Introduction**

The use of the Internet has become widespread as technology gradually renews itself. In this direction social media is an online network where users publish and share their own content. In reality, social media is a new place for individuals, organizations, and even governments to communicate with one another commercially, socially, politically, and educationally and to share knowledge, ideas, products, and services (Hawkins and Vel, 2013; Rathore, Ilavarasan, & Dwivedi, 2016; Usher et al., 2014; Zeng and Gerritsen, 2014; Zhu and Chen, 2015). This platform has become one of the indispensable needs of people. Social media is a very useful tool, provided that it is not overdone and used consciously. For example, while hot developments can be followed instantly, developments behind the scenes can be learned. However, social media is continually used as a platform for advertisement and marketing. There is still a question of how companies can build social media ads to attract and inspire consumers to buy their products. This situation is closely related to customer satisfaction. For consumers, the driver and outcome of consumption is need satisfaction. Thus, the meaning of marketing satisfy human need has long been recognized by marketing scholars (Kotler & Levy, 1969; Levitt, 1960). Kietzmann, Hermkens, McCarty, and Silvestre (2011) pointed out that a firm must develop strategies that are congruent with, different social media functionalities and the goals of the firm. Some research supports the notion that congruence of advertisement and website content will decrease feeling of intervention and increase positive reactions toward ads (Choi & Rifon, 2002; Edwards, Li & Lee, 2002; Newman, Stem, & Sprott, 2004; Zhu & Chen, 2015).

In this study, it was investigated whether there is a difference between the effects of social media advertisements on the shopping behaviors of university students depending on the needs of the age, according to their individual or socio-cultural characteristics.

## **Literature Review**

The development of technology has caused changes in consumers' buying behaviours. The consumers have also started shopping from channels such as the Internet and social media besides other traditional channels. Social media is an important part of our daily lives. Things are people spend tens of hours on social media every week, either from their computers or smartphones. This has prompted many businesses to invest a large amount in social media ads. But these marketing strategies have no fruit without a proper plan and understanding. Therefore,

the main objective of using social media to encourage and connect is to influence the decision-making process of the customer (Farhan, 2021). A recent study Kizgin et al. (2020) pointed out that identifies cultural relationships and multicultural dynamics in this area is needed. Li et al. (1999) results indicated that the factors that predict a consumer's online buying behavior, using primary data from an online survey of national Internet users. Findings of the influence of shopping orientations on online buying behavior have several implications. Ducoffe (1996) investigated the impact on attitudes of online ads. It was concluded that data and entertainment had significant beneficial effects on social media ads' perceived value. Erdoğan (1999) assumes that consumers tend to have positive stereotypes about physically attractive people. His research shows that people are more likely to change their beliefs if those whom they communicate with are perceived as physically attractive. Wolin et al. (2002) also analyzed the attitudes and conduct of metropolitan consumers on online ads and get that the element of knowledge has a positive effect on behavior and intention.

## **Material and Method**

In this study, it was investigated whether there is a difference between the effects of social media advertisements on the shopping behaviors of university students depending on the needs of the age, according to their individual or socio-cultural characteristics. In this direction, demographic and socioeconomic factors that affect the shopping of social media advertisements of university students continuing their education and training at Atatürk University were investigated.

Since the data used for the purpose of the study were categorical, the most appropriate statistical method was determined. It has been examined whether the obtained data meet the assumptions of the applied method. Linear regression analysis was used within the study. Thanks to this analysis, the appropriate model was determined.

Mc Cullagh (1980), is a model in which the observable dependent variable  $Y$  has  $j = 0, 1, 2, \dots, k$  ordered scales. Logistic Regression Method cannot be used when the ranking of categories is close (Menard, 2001). This method the relationship between two or more variables using regression. For example, relationship between advertising expenditures and sales. Develop a model to show how the variables are related and predict. Dependent variable; the variable we are trying to predict ( $y$ -sales) and independent variable, we use to predict ( $x$ -advertising expenditures).

So far, in applying the different variables of the general linear model, we have confined our attention to situations in which the independent variable  $X$  represents a set of essentially qualitative distinctions. The model adopted in these instances has treated the variable  $X$  strictly as an dummy variable, taking on only the values 0 and 1, depending on which set of groups is being specified (Hays, 1994).

The model we use to describe the relation between  $X$  and  $Y$  will be linear. However, unlike the model of analysis of variance, the model we use here will relate two variables,  $X$  and  $Y$ . That is, we assume that

$$y = \beta_0 + \beta_1 x + \varepsilon \quad (1)$$

where  $\beta_0$  is the y-intercept of the regression line,  $\beta_1$  is the slope of the regression line,  $\varepsilon$  is the error term.

### Sample of the study

In this study, the universe of the research is formed by the university students who are shopping effect. The data set to be used in the study consists of horizontal cross-section data obtained with the help of a questionnaire applied to university students. The determination of the sample size is based on the simple random sampling method,

$$n = \frac{NPQZ^2}{(N-1)d^2 + PQZ^2} \quad (2)$$

Estimated formula was utilized for sample size (Eygu and Gulluce, 2017:276). In this formula:

$n$  = sample size

$N$  = Population density (number of students in Ataturk University)

$P$  = Percentage of participants who want to social media.

$Q$  = Percentage of Participants who don't want to social media (1-P).

$Z = \%(1-\alpha)$  is the Z Test value

$\alpha$  = Significance Level

$d$  = Error (Tolerance) share

The minimum sample size targeted in the study was 305. A total of 364 surveys were carried out, considering that there may be missing and incorrectly filled surveys. The division of the units in terms of characteristics, qualities or qualities which are similar to each other is called the layer. The process of estimating the population parameters by selecting simple random samples from each layer by dividing the population into subgroups, which are not intersecting with each other, is called layered random sampling. Units are selected independently from each layer (Ozdemir, Tekin, & Esin, 2015: 167-168).

## Analyses and Results

By using linear regression analysis, the determination of what factors are influential in the shopping effect of university students and the magnitude of their effect have been examined. All demographic variables were included as independent variables in the model, because it was assumed that the demographic variables of the questionnaire could directly or indirectly influence the shopping effect of the students. The findings related to factors that may be effective for the effect of social media on shopping in Turkey are shown in Table 1. Of our sample population, 53.8% female, 46.2% male, 71.4% married, 34.1% were in the 21-22 age range. While 25.8% of father's were high school graduates, 23.1% were university graduates. Table 1 shows that 22% of family average monthly net income of ₺2001-3000 and 34.1% average monthly spending ₺501-750.

**Table 1.** Descriptives Statistics for Independent Variables

Variables		n	%	Değişken	n	%
Gender	Female	196	53,8	Where is your accommodation at the university?	Government dorm	137 37,6
	Male	168	46,2		Private dormitory	40 11
Marital Status	Married	260	71,4	İkâme yeriniz	Home with friend	38 10,4
	Single	104	28,5		Home alone	13 3,6
Age	17-18	23	6,3	Household size	Family at home	133 36,5
	19-20	122	33,5		Kinship	3 0,8
	21-22	124	34,1			
	23-24	49	13,5		1-3	48 13,2

	25-26	34	9,3		4-6	254	69,8
	27 ve +	12	3,3		7 +	62	17,1
Father's education level	Illiterate	18	4,9	Family average monthly income (₺)	Less than ₺2000	58	15,9
	Elementary school	91	25		₺2001-3000	80	22
	Primary education	65	17,9		₺3001-4000	71	19,5
	High school	94	25,8		₺4001-5000	40	11
	College	84	23,1		₺5001-6000	42	11,5
	Master	12	3,3		₺6001+	73	20,1
Mother's education level	Illiterate	57	15,7	Average monthly spending (₺)	Less than ₺500	96	26,4
	Elementary school	120	33,0		₺501-750	124	34,1
	Primary education	77	21,2		₺751-1000	46	12,6
	High school	66	18,1		₺1001-1250	43	11,8
	College	38	10,4		₺1251-1500	28	7,7
	Master	6	1,6		₺1501+	27	7,7
What is your department?	Social	131	36	Father's job	Official	84	23,1
	Science	61	16,8		Employee	48	13,2
	Health	58	15,9		Artisan	45	12,4
	Education	107	29,4		Free work	67	18,4
	Fine Arts	6	1,6		Farmer	50	13,7
	Sport	1	0,3		Retired	70	19,2

The binary logit model results regarding the effect of social media on shopping among students are given in Table 2. In this table, the coefficient ( $\beta$ ), standard error,  $p$ -value showing the significance of the variables, odds ratio ( $e^{\beta}$ ), confidence interval for the logistic regression result are included.

**Table 2.** Students' Binary Logit Model Results on the Effect of Social Media on Shopping

Variables	$\beta$	Standart error	p	$e^{\beta}$	95% GA	
					Alt	Üst
<b>Gender (Reference: Male)</b>						
Female	0,207	0,155	0,181	1,229	-0,097	0,513
<b>Marital status (Reference: Married)</b>						
Single	-0,422	0,177	0,018 <sup>b</sup>	0,655	-0,771	-0,073
<b>Age (Reference: 27 +)</b>						
17-18	-0,053	0,525	0,919	1,054	-1,087	0,980
19-20	0,129	0,460	0,778	1,137	-0,776	1,036
21-22	0,201	0,451	0,655	1,222	-0,686	1,089
23-24	0,245	0,462	0,596	1,277	-0,665	1,156
25-26	0,069	0,493	0,889	1,071	-0,901	1,039
<b>Father's Education (Reference: Master)</b>						
Basic Level	-0,878	0,384	0,023 <sup>b</sup>	0,415	-1,635	-0,120
Intermediate	0,006	0,218	0,975	1,006	-0,422	0,436
Elementary School	-0,238	0,226	0,295	0,788	-0,684	0,208
High School	-0,247	0,221	0,266	0,781	-0,683	0,188
<b>Family average monthly income (₺) (Reference: ₺4001-5000)</b>						
₺2000 and under	-0,344	0,326	0,916	0,708	-0,677	0,608
₺2001-3000	0,107	0,281	0,703	1,112	-0,445	0,660
₺3001-4000	-0,106	0,282	0,707	0,899	-0,663	0,449
₺5001-6000	0,083	0,309	0,787	1,086	-0,524	0,692
6001 ve üstü	-0,203	0,293	0,490	0,816	-0,781	0,375
<b>Average monthly spending (Reference: ₺1501 ve üstü)</b>						

₺500 and under	-	-0,194	0,586	1,214	-0,896	0,507
	0,194					
₺501-750	-	-0,129	0,711	0,878	-0,896	0,507
	0,129					
₺751-1000	-	0,366	0,469	0,767	-0,814	0,556
	0,265					
₺1001-1250	-	-1,42	0,097	1,635	-1,205	0,210
	0,492		<sup>c</sup>			
₺1251-1500	-	-1,04	0,298	0,667	-1,172	0,362
	0,405					
constant term	3,722	2,059	1,81	0,072	-0,332	7,774

<sup>a</sup>p < .01; <sup>b</sup>p < .05; <sup>c</sup>p < .10

In the logistic regression model, each category of independent variables with more than two categories was included in the model by defining a dummy variable.

According to the results of the analysis, odds ratio of singles ( $OR=e^{\beta} = 0,655$ ; %95 GA = -0,771--0,073) tending to shopping on social media is lower than married people.

According to the educational status of the fathers, the odds ratio of students ( $OR=e^{\beta} = 0,415$ ; %95 GA = -1,635--0,120) whose fathers graduated from primary school is higher than those whose fathers are university graduates.

According to the student's monthly expenditure, the odds ratio of being inclined towards tending to shopping on social media is higher for students with a monthly expenditure of ₺1001-1251 ( $OR=e^{\beta} = 1,635$ ; %95 GA = -1,205--0,210) than for students with a monthly expenditure of more than ₺1501.

## Conclusions

The present study explores the tending to shopping on social media among Atatürk University students in Turkey. The context of the study refers to the dynamics of cultural adaptation since leaving in a new cultural context requires certain regard to the customs and mores of this culture.

In our study, as we investigated the sociodemographic factors that might influence student's social media factors, we discovered that marital status, father's education level and average

monthly spending was of the factors that affected social media for all groups. Thus, the objective of this research falls within a prolegomenon to a social media use. To that end, it turns out to be necessary to understand the students' perception of the use of social media, as well as the relationship between the use of social media and the students' use process. As for the relationship between the use of social media and marital status, father's education level, average monthly spending, the results show that the university students' perception of social media deeply determine the way their shopping on the digital stage.

## References

- Ducoffe, R. H. (1996). Advertising value and advertising on the web. *Journal of advertising research*, 36(5), 21-21.
- Edwards, S. M., Li, H., & Lee, J. H. (2002). Forced exposure and psychological reactance: Antecedents and consequences of the perceived intrusiveness of pop-up ads. *Journal of advertising*, 31(3), 83-95.
- Erdoğan, B.Z. (1999). Celebrity Endorsement: A Literature Review. *Journal of Marketing Management*, vol: 15 (4), pp: 291-314.
- Eygu, H., & Gulluce, A. C. (2017). Determination of Customer Satisfaction in Conservative Concept Hotels by Ordinal Logistic Regression Analysis. *Journal of Financial Risk Management*, 6(03), 269.
- Farhan, M. (2021). The Impact of Social Media Advertisements on Customer Purchase Intention: Evidence From Egypt. Institute of postgraduate education business administration thesis program.
- Hawkins, K., & Vel, P. (2013). Attitudinal loyalty, behavioural loyalty and social media: An introspection. *The Marketing Review*, 13(2), 125-141.
- Kietzmann, J. H., Hermkens, K., McCarthy, I. P., & Silvestre, B. S. (2011). Social media? Get serious! Understanding the functional building blocks of social media. *Business horizons*, 54(3), 241-251.
- Kizgin, H., Dey, B. L., Dwivedi, Y. K., Hughes, L., Jamal, A., Jones, P., ... &
- Williams, M. D. (2020). The impact of social media on consumer acculturation: Current challenges, opportunities, and an agenda for research and practice. *International Journal of Information Management*, 51, 102026.
- Kotler, P., & Levy, S. J. (1969). Broadening the concept of marketing. *Journal of marketing*, 33(1), 10-15.
- Levitt, T. (1960). Marketing myopia. *Harvard business review*, 38(4), 24-47.

- Li, H., Kuo, C., & Rusell, M. G. (1999). The impact of perceived channel utilities, shopping orientations, and demographics on the consumer's online buying behavior. *Journal of computer-mediated communication*, 5(2), JCMC521.
- Mc Cullagh, P. (1980). Regression Models for Ordinal Data. *Journal of the Royal Statistical Society*, 42, 109-142.
- Menard, S. (2001). *Applied Logistic Regression Analysis* (2nd ed.). London: Sage Publications.
- Newman, E. J., Stem, D. E., & Sprott, D. E. (2004). Banner advertisement and Web site congruity effects on consumer Web site perceptions. *Industrial Management & Data Systems*.
- Ozdemir, A. Y., Tekin, Ş. T., & Esin, A. A. (2015). *Introduction to Sampling Methods with Solved Samples*. Ankara: Seckin Publishing.
- Rathore, A. K., Ilavarasan, P. V., & Dwivedi, Y. K. (2016). Social media content and product co-creation: an emerging paradigm. *Journal of Enterprise Information Management*.
- Usher, K., Woods, C., Casella, E., Glass, N., Wilson, R., Mayner, L., ... & Irwin, P. (2014). Australian health professions student use of social media. *Collegian*, 21(2), 95-101.
- William, L. Hays (1994). *Statistics*, Fifth Edition, Wadsworth Group.
- Wolin, L. D., Korgaonkar, P., & Lund, D. (2002). Beliefs, attitudes and behaviour towards Web advertising. *International Journal of Advertising*, 21(1), 87-113.
- Zeng, B., & Gerritsen, R. (2014). What do we know about social media in tourism? A review. *Tourism management perspectives*, 10, 27-36.
- Zhu, Y. Q., & Chen, H. G. (2015). Social media and human need satisfaction: Implications for social media marketing. *Business horizons*, 58(3), 335-345.

## **A HOLISTIC APPROACH TO THE CONCEPT OF EXPERIENTIAL MARKETING: A LITERATURE REVIEW**

by V. Özlem Akgün, Selçuk University, [ozlemakgun@selcuk.edu.tr](mailto:ozlemakgun@selcuk.edu.tr); Hülya Aslantaş, Selçuk University, [hulyaslan97@yahoo.com](mailto:hulyaslan97@yahoo.com)

**Abstract:** Increasing competition conditions, constantly changing and renewing customer demands and needs, as well as the development of technological and economic conditions, warn businesses to stay up to date. Keeping up with the increasing and changing conditions, increasing customer satisfaction, creating brand loyalty, achieving their purchasing targets and gaining an advantage over their competitors necessitate having a dynamic structure. Although there are different methods of providing this dynamism, one of the prominent among these methods is experiential marketing practices. The fact that today's consumers act by making emotional decisions rather than rational decisions, in other words, the consumer profile that has changed from past to present greatly increases the importance of modern marketing methods. Experiential marketing is a kind of modern marketing method that is carried out in order to determine the wants and needs of consumers and to satisfy the consumers, by appealing to the five senses and to provide unforgettable moments and emotions. Experiential marketing activities, which are carried out with the aim of creating a holistic shopping experience and interacting directly with consumers, are one of the methods by which it is possible to directly reflect the benefits of the product or service to the consumer. While reflecting these benefits, the sensory, emotional, behavioral, cognitive and relational dimensions of experiential marketing are utilized. Many marketing managers, who aim to create positive emotions in the minds of consumers, leave good memories, offer value to consumers, and establish meaningful bonds between the brand and the consumer, today serve this purpose by focusing on creating new experiences for customers about the goods and services they want to buy.

The aim of this study is to reveal the theoretical background of the concept of experiential marketing with all its dimensions and to deal with the studies on the subject with a holistic approach. In addition, it is aimed to include sample applications for the experiential marketing activities carried out by the brands.

**Keywords:** Experiential marketing, Customer experience, Modern marketing, Consumer behavior.

## **1.INTRODUCTION**

Today's changing and developing conditions require dynamism in many subjects. Many factors such as new markets, increasing and changing conditions in competition, technological developments, domestic and foreign economic events, changes in consumers' behavior, increasing consumption trend and consumer awareness have brought about different marketing searches. In this regard, it is stated that experiential marketing activities, which are among the modern marketing methods in providing competitive advantage, come to the fore.

Experiential marketing considers not only the rational desires of consumers, but also their emotions. The purpose of experiential marketing is to accurately determine the expectations of consumers from goods and services and to meet the expectations of consumers by creating an appropriate experience strategy. In this context, it is stated that experiential marketing activities generally serve the purpose of providing consumers with different experiences about goods and services.

In this study, within the scope of the theoretical framework for the concept of experiential marketing, it is aimed to include the characteristics and dimensions of experiential marketing and the studies on this subject, as well as sample brand applications related to this field.

## **2. THEORETICAL FRAMEWORK OF EXPERIENTIAL MARKETING CONCEPT**

According to the Turkish Language Association, the concept of experience is defined as “all of the knowledge and skills that an individual has learned during a certain period of time and throughout his/her life” (TDK, 2021). Its English equivalent is “experience” (Pine and Gilmore, 1990: 90). Looking at the history of the concept of experience, it first appeared in Holbrook and Hirschman's article related to consumer behavior. Schmitt defined the concept of experience as various activities consisting of behaviors and stages before and after the purchase (Schmitt, 1999: 59). In this article, the concept of experience is defined as the situation that arises in relation to the consumption of goods or services (Yeşilot and Dal, 2019: 266).

Marketing is the process of planning and executing the development, pricing, promotion, and distribution of goods, services, and ideas to create exchanges that meet personal and organizational goals.

Experiential marketing is a concept that deals with the relationship between the consumer and the brand in a holistic way. Especially in the concept of experiential marketing; focuses on what

the consumer wants. According to the concept of experiential marketing, marketing activity is to understand the basis of the business, what the customer wants, where he aims to go, and what kind of change he wants to make in his life with the goods or services he wants to buy. The main purpose here is not just to sell goods or services to the customer. Addressing the customer is the primary purpose of experiential marketing (Furtun, 2012: 24).

The concept of experiential marketing was first introduced by Schmitt (Çeltek, 2010: 17). According to Schmitt (1999) experiential marketing is defined as "a phenomenon that looks at consumption for customers who act with their senses and minds from the perspective of experience and approaches them according to the experiences of the customers. Experiential marketing allows customers to experience that good or service before purchasing and to develop a marketing strategy by sending a positive or negative message to the environment by having an idea about it (Bağdaş, 2013: 3). The experiential marketing view is the process of strategically maintaining the management of the experience of the goods or services given to the buyers (Nagasawa, 2008: 312). The concept of experiential marketing can be explained as activities that will affect the relationship between the buyer and the product/service (Türk, 2020: 330). Kotler and Keller (2016: 20) revealed that the main component in the concept of experiential marketing is the integration of the experiences of sellers and consumers for the goods and services they offer. Experiential marketing is the process of involving customers in the experience of the product or brand. In a way, this situation is also expressed as a marketing contract where live and face-to-face interaction takes place. The purpose of companies to follow such a strategy is to appeal to the emotional senses that customers are most sensitive to and to be effective in the decisions they will make (Adeosun and Ganju, 2012: 21). According to the International Association of Experiential Marketing (IXMA, 2010), experiential marketing is a tool that enables communication between the business and the customer via the sensory pathway and an interaction between customers and brands, products and services. Experiential marketing aims to understand what the goods or services that consumers will buy mean to them and to provide an experience of what they want (Güney and Karakadılar, 2015: 133). Experiential marketing practices focus on customers' experiences rather than the benefits and functions of products (Altunışık et al. 2006). Pine and Gilmore explain this situation as "when an individual buys a service, he receives in a series of intangible activities of the product, but when he buys experience, he pays for entertainment" (Furtun, 2012: 25). For example, the act of drinking coffee can be interpreted as an ordinary event, but the possibilities that Starbucks offers to customers make drinking coffee quite different. The smell of coffee, the special name

for the glasses, the music, the smell that appeals to eating different foods, has made drinking coffee different and enticing. As a result, in experiential marketing, it is seen that the physical environment is an important factor in addition to the benefit and brand of the product (Altunışık et al. 2006). Experiential marketing is also seen as a promotional tool used to encourage consumers' emotional interaction with products and services and to be physically affected by these products and services (Celep, 2019: 295). Brand managers who benefit from experiential marketing activities consider consumers as rational and dynamic individuals, and these individuals desire to have enjoyable experiences (Datta, 2017: 26). The purpose of experiential marketing is to create experiences that integrate the emotions of individuals with different dimensions of these emotions (Srivastava, 2008: 71). Experiential marketing is the repetition of this after consumers operate in a company, buy products or services from there, and in this sense, experiential marketing contributes to faster and positive purchasing decisions for consumers (Farios, Aguior, & Melo, 2014: 93). In experiential marketing, the good and service itself, its benefits, its brand and the environment in which the company that makes it experience is also very important (Altunışık, Özdemir and Torlak, 2006: 167). People generally do not forget the attractiveness of the moment and the environment they have experienced, and when they come back to that environment, they feel as if they have experienced the same experience again. For this reason, businesses should not ignore this detail when choosing a venue.

## **2.1. Characteristics of Experiential Marketing**

Looking at experiential marketing in general, it is possible to say that; the concept includes a customer-oriented marketing approach. It is possible to explain the characteristics of experiential marketing under four headings (Schmitt, 1999: 58):

*Consumer experience:* Experiential marketing focuses on consumer experiences from a broader perspective, as opposed to the narrow product perspective in traditional marketing. These experiences are obtained by considering feelings, consciousness, emotions and relationships.

*Consumption as a holistic experience:* All focal points that consumers will experience are considered as a whole. For example, products such as shampoo and conditioner are grouped under the heading of "shower products" instead of being handled separately.

*Rational and sensory thinking consumers:* Consumers are beings who think and act sensory as well as being rational. In addition to the needs of the consumers, the demands and the things that will make them happy seem to be more important in today's modern marketing age.

Consumers generally do not exhibit a rational behavior in the purchasing process. It is enough for them to feel happy, to enjoy the good or service they buy, to buy that good or service.

*Eclecticism of Methods and Tools:* The difference between experiential marketing and traditional marketing is that it is not limited to a methodological ideology, in other words, it is eclectic.

## **2.2. Benefits of Experiential Marketing**

Experiential marketing has many benefits for businesses. Some of the prominent ones among these benefits are expressed as follows (Edvardson et al. 2005: 150):

Experiential marketing;

- Creates a personalized value for individuals.
- Increases consumer and customer loyalty.
- It creates an image of uniqueness in the identity of companies.
- It creates a direction for the demands and expectations of consumers and customers.
- It increases the profit rates along with the increase in sales.

Although experiential marketing is considered a very costly activity for business managers at first, a good experiential marketing strategy can replace this expense with much larger profit figures. For this, it is extremely important for businesses to be open to innovation, customer-oriented and in a position where they can communicate with the customer. When we look at the basis of experiential marketing, it is seen that customers are not only rational thinking beings, but also act as emotional thinking beings. This is a very important opportunity to strengthen the bond between the customer and the business. The more the company is in close contact with the customer and focuses on his wishes and needs, the more customer loyalty increases.

## **2.3. Differences Between Experiential Marketing and Traditional Marketing**

There are some differences between experiential marketing and traditional marketing. These differences are outlined in the table below:

**Table 1.** Differences Between Experiential Marketing and Traditional Marketing

	<b>Experiential Marketing</b>	<b>Traditional Marketing</b>
Theoretical Structure	The customer is both rational and sensual.	The customer is only rational.
Attention	It's more about experience.	It is aimed at the functions of products and services.
Customer Role	In the experience phase, the role of the customer is more prominent.	The customer is passive.
Marketing Communications	There is communication between the business and the customer. Feedback is provided.	Communication between the business and the customer is one-way.

Reference: Çelik, 2013: 78

When the table is examined, it is stated that in experiential marketing activities, mostly customer-oriented experience strategies are applied, while in traditional marketing, strategies for goods and services are applied. Experiential marketing is rational and experiences are very important. In traditional marketing, the influence of the customer is relatively small, that is, traditional marketing activities are not active and therefore there is no mutual interaction between the business and the customer. In traditional marketing, communication usually takes place from business to customer. In experiential marketing, on the other hand, there is an environment where feedback is desired. Customer requests and complaints are very important.

#### **2.4. Dimensions of Experiential Marketing**

Companies benefit from five different components used in experiential marketing in order to provide consumers with different experiences. These components are sensory, emotional, cognitive, behavioral and relational marketing components (Schmitt, 1999: 60). It is possible to briefly describe these components as follows:

*Sensory experience:* The sensory experience is the experience in which a method that can be perceived by the five senses of hearing, sight, touch and taste is followed. With these five sense organs, businesses try to differentiate their products and services and try to appeal to the tastes and wishes of consumers. Consumers will be able to provide experience with these five sense organs and create an impression against the product or service (Nagasawa, 2008: 213-215).

The more the meaning and difference that the senses will add appeals to and encourages consumers, the more gains to be obtained as a result of this experience. These activities, prepared for the sense organs, can leave unforgettable traces and memories for customers. The most persistent of these sense organs are smell and taste. Smell acquires a meaning specific to how and where a person smells it for the first time. Even if the same smell was smelled in another place at another time, the person can remember the moment and place that he smelled for the first time. Taste is another important sense. Some flavors; they have the potential to affect people quite a lot in terms of their taste and appearance. These two senses, in other words, the experience of smell and taste, are used in many different sectors, especially in the service sector. For example, in the tourism sector, the soaps and soap scents put in the rooms, the smells and flavors of the food in the restaurants offer important opportunities to the marketing managers in order to have an unforgettable holiday and to make the customers choose the hotel again and to create a positive image.

*Emotional experience:* Emotional experiences are often experiences that address the feelings of customers. In order to be successful in emotional experience, it is necessary to determine what customers feel and what their emotions are. (Schmitt, 1999: 61). The purpose of emotional experience is to empathize with the customer and to identify stimuli based on their emotions (Günay, 2008: 66). In other words, in emotional experience, it is essential to focus on consumers' unrevealed, hidden feelings and emotions. For example, due to the religion and belief of citizens in Turkey, holidays are important. Preparing an advertisement for the "Kent" candy brand that appeals to consumers before the holidays is an example of emotional marketing. In this way, it becomes possible for businesses to create an emotional experience in the minds of consumers (Yetiş, 2015: 93).

*Cognitive experience:* Another experiential marketing dimension is cognitive experience. In this experience dimension, consumers are encouraged to problem solve. Innovation and creative thinking are at the forefront (Yetiş, 2015: 93). The purpose of cognitive marketing is to enable consumers to produce new ideas and to encourage them to think creatively (Yang, 2009). An example of cognitive marketing is the Volvo automotive brand. Volvo is the first automotive brand that comes to mind when it comes to safe cars. This shows that the company has a secure image of the brand in the eyes of consumers. Volvo is a brand that has introduced itself to consumers as a safe automotive brand and has become accustomed to it. The formation of this situation was formed by the integration of cognitive perception and experience on the vehicle (Koç, 2013: 79).

*Behavioral experience:* Behavioral experience, which is another dimension of experiential marketing, focuses on customers' physical experiences (Demirtaş, 2017: 54). In behavioral experience, companies aim to create an impact on consumer behavior, lifestyle and relationships (Yuan et al., 2008: 394). The purpose of behavioral experience is to adopt the company's products or services to customers and to ensure their permanence and use for a long time (Nigam, 2012: 115). For example, while the Microsoft brand aims for customers to think deeply and differently about the product with its campaign named “where do you want to go today”, Nike company aims for the customer to buy and use the product without thinking with its campaign called “just do it” (Liu, 2012: 177).

*Relational experience:* The last of the dimensions of experiential marketing is relational experience. This experience dimension is related to and influenced by the other four types of experience. While other types of experience involve more personal feelings, relational experience includes relationships with which the person can communicate with each other. In other words, in relational experience, there should be an environment where the person can communicate and interact (Schmitt, 1999). Relational experience is more about sociability (Çakırkaya, 2019: 3110).

The purpose of marketing campaigns involving relational experience is to create a sense of belonging in consumers. The most important reason for this situation is that the individual feels the need to belong to a society, group or social class according to Maslow's hierarchy of needs. For example, cheering and team support at a football match or being a member of a group of graduates from the university you graduated from is to strengthen the sense of belonging (Baştuğ, 2018: 30). Another example concerns the American motorcycle brand Harley Davidson. This brand has become a lifestyle for individuals, and this lifestyle is built on the symbolization of Harley Davidson by belongings, clothes and even tattoos, because these individuals see themselves as a part of Harley and try to integrate with it completely (Schmitt, 1999: 23).

### **3. EXPERIENTIAL MARKETING STUDIES IN TURKEY AND THE WORLD**

In this part of the study, it is aimed to include the studies and the results of the experimental marketing concept, which has attracted attention by both academicians and marketing managers in recent years.

**Table 2.** Studies on Experiential Marketing

Tsaour, Chiu & Wang, 2007	In this study, the effect of experiential marketing activities on customers was investigated. To find out about this effect, a survey was conducted on visitors at Taipei Zoo. According to the results of the survey, it has been determined that experiential marketing activities have a positive effect on emotions.
Grundey, 2008	In this study, the characteristics of traditional and experiential marketing were examined. According to this comparative analysis study, it has been tried to show that experiential marketing is more effective on the consumer. Traditional marketing's focusing on the functional features of the product, having a rational point of view, and including certain product categories have come to the fore. In experiential marketing, on the other hand, it has been emphasized that the qualities of the consumer such as both rational and emotional thinking, experiential marketing directing the consumer to more experience and enabling them to think holistically are important. As a result, it has been revealed that traditional marketing deals with consumer behavior only with the rational dimension, while experiential marketing deals with both rational and emotional dimensions.
Kustini, 2011	This research was carried out on Honda brand motorcycle products in Surabaya. The aim of the study is to determine the effects of experiential marketing on the formation of emotional brand awareness and the development of the sense of loyalty on these products. SEM (Structural Equation Model) method was used in data analysis and a survey was conducted with 120 Honda motorcycle users in Surabaya. It has been concluded that there is a positive and significant relationship between experiential marketing and brand trust on product loyalty, but the effect of emotional branding on loyalty is not positive and significant.
Maghnati, Ling and Nasermodeli 2012	In this study, the relationship between experiential marketing and experiential value of current smartphone users in Malaysia was examined. Within the scope of this research, a questionnaire was applied to 550 people. As a result, it has been revealed that there is a positive relationship between sensory experience, feeling experience, action experience, relationship experience, and experience value and thinking experience.
Liang, Chen, Duan and Ni 2013	In this study, which was conducted with data collected from chain coffee shops in Taiwan, the relationship between five dimensions of experiential marketing (emotional, sensory, behavioral and relational experience), purchase intention, and gender differences were examined. As a result of the survey conducted with 242 people, it was seen that experiential marketing had a positive effect on purchase intention. It was concluded that there is an effect on gender differences

	in the relationship between experiential marketing and purchase intention.
Uygur and Doğan, 2013	In this study on restaurants with and without a corporate management approach, the experiences of restaurant businesses to their customers and the effect of these experiences on customer satisfaction were investigated. According to the results of this research, in which 409 people participated, it was determined that restaurants without a corporate governance approach, the products and prices they offer satisfy their customers more, and the employees and restaurant services in this restaurant are more concerned. Accordingly, it was concluded that there is a positive relationship between experiential marketing and customer satisfaction. In addition, it has been observed that creating different experiences increases customer satisfaction.
Khan and Rahman, 2014	In this study, which examines the importance of the approach to the experiential markets for the passenger car market in India from the customers' point of view, the relationship between experiential marketing and customer purchase intention is examined. Mixed method research design was used as the research method. Data analysis was performed by multiple regression. As a result of this study, it has been seen that feeling, thinking and sensory experiences have an effect on customer purchase intention in the passenger car market. This shows that experiential marketing in the passenger car market positively affects the purchase intention of the customer.
Verma and Jain, 2015	This study was conducted on India's five leading luxury hotel chains for experiential marketing to link customers' memories with products and brands. Experiential marketing interviews were conducted with the managers of these hotels. As a result of the interviews, it has been seen that experiential marketing is effective before, during and after the experience of the customers. Accordingly, it is suggested that customer requests and needs should be taken into account in order to provide a good and customized experience.
Pratminingsih, Astuty and Widyatami 2018	A descriptive research was conducted in this study to examine the effect of experiential marketing and service quality on the satisfaction and loyalty of ethnic restaurant customers. As a result of this research conducted with 250 participants, it was concluded that experiential marketing and service quality have an effect on ethnic restaurant customer satisfaction and loyalty. In this study, it was stated that in order to increase customer loyalty and satisfaction, the service quality should be presented in the best way as well as the development of experiential marketing practices.
Hidayat and Ramadhani, 2019	This study, which examines the effect of experiential marketing on customer satisfaction based on relationship quality, was carried out with ticket sales officials in Indonesia. As a result of this study, it was

	found that there is a positive effect between experiential marketing and relationship quality.
Wahyono and Nurjanah, 2020	The aim of this study is to determine the effect of service quality and customer satisfaction on customer loyalty in experiential marketing activities. This study was conducted for PT POS Indonesia (Perseo) Semarang customers. A questionnaire was applied to 160 people and Structural Equation Modeling was used in the analysis of the data. As a result of the research; experiential marketing positively and significantly affects customer loyalty; It has been found that customer satisfaction has a positive and significant effect on customer loyalty and experiential marketing affects service quality positively and significantly.
Ishara and Gayathree, 2020	The aim of this study, which was carried out in Sri Lanka, is to determine whether customers can be retained in the hotel industry through experiential marketing activities and customer satisfaction. This study was conducted on people who visited 3, 4 and 5 star hotels in Sri Lanka. As a result of the survey conducted with 205 people, it was found that experiential marketing affects customer satisfaction. Within the scope of the results, it is recommended for managers in the hotel industry to focus on all aspects of experiential marketing to create customer loyalty.
Haumer, Kolo and Reiners 2020	In this study, the effect of "Augmented Reality Experiential Marketing" (AREM) on brand awareness, brand associations, perceived quality and brand loyalty, and on consumers' purchase intentions were investigated. As a result of the survey conducted with 100 participants, it was concluded that AREM positively affects brand equity and consumers' purchase intention through brand awareness, brand associations and brand loyalty dimensions. In addition, it was found that brand equity positively increases purchasing behavior through increased brand awareness and brand loyalty.
Abadi, Nursyamsi and Syamsuddin, 2020	In this study, in which Gojek transportation service users in the city of Makassar in Indonesia participated, the effect of customer value and experiential marketing on customer loyalty was measured with consumer satisfaction as an intervening variable. As a result of the research conducted with 100 participants, it was found that customer value and experiential marketing significantly affect customer satisfaction and customer loyalty.
Oliveira, Gonçalves and Sous 2020	In this study, the relationships between some determinants of experiential marketing and loyalty in the banking sector were examined. As a result of this study, which was carried out with 211 participants, it was concluded that there is a relationship between experiential marketing and some determinants of loyalty. In addition,

	it is emphasized that experiential marketing practices can increase loyalty in the banking sector.
Tavares, Santos, Diogo and Ratten 2020	The aim of this study is to examine the experiences of quarantine survivors in the Covid-19 outbreak based on an experimental marketing perspective and to validate an experience scale for the quarantine context. In this context, a survey was conducted with a sample of 726 participants in home quarantine in Portugal. According to the results of exploratory and confirmatory factor analysis, a four-factor structure was created with the concepts of “Sense and Feel”, “Pandemic Feel”, “Pandemic Think” and “Act”. Experiences showed itself more intensely in the "Pandemic Think" and "Sense and Fell" factors. As a result of this study, it is aimed that those working in the field of health and marketing will use this data to make it useful for people and to carry out improvement and development studies in order to increase their health and welfare levels.
Türk, 2020	This study was carried out to examine how the experiential marketing practices and dimensions of telecommunication companies in Turkey create a perception on consumers and whether the perceptions of users on the five dimensions of experiential marketing differ according to the operators they use. A survey was conducted with a total of 458 users from GSM operators Turkcell, Turk Telekom and Vodafone in Muğla. As a result of the study, it was determined that the perception of experiential marketing and its dimensions is higher in Türk Telekom users than in Vodafone and Turkcell users.

#### **4. BRAND APPLICATIONS**

In this part of the study, it is aimed to include sample applications for experimental marketing activities carried out by brands that want to gain competitive advantage against their competitors.

The Sprite brand, which started production in the lemon soda category in 1961, is actually a sub-brand of the "The Coca Cola" brand. Sprite, which started a shower campaign on the Brazilian beaches in 2012, installed cold shower panels covered with the brand name and images within the scope of this campaign. Through this experiential marketing activity, the brand sought to show people that cold water comes from the cooling effect of Sprite.



Reference: [www.rafineri.net](http://www.rafineri.net) (1)

The taste of Redbull, an energy drink brand, consists of herbs that grow in the Far East and heal. The aim of Redbull with the slogan "Redbull Gives Wings" is to create a perception that people who drink this beverage will feel quite energetic. The Redbull brand organizes various events such as airplane races and extreme sports events in order to attract the attention of consumers. One of the most talked about among these was the "stratosphere jump", where paratrooper Felix Baumgartner exceeded the speed of sound. Thanks to this jump, Redbull has come up with an interesting example of experiential marketing.



Reference: [www.redbull.com](http://www.redbull.com) (2)

Despite being known as an automobile brand, Volkswagen is among the brands that benefit from various experiential marketing activities in order to move itself beyond the automotive industry. As part of an event organized within this scope, "smart piano stairs" were installed next to the escalator at a metro stop in Germany. When people walk on the piano-stairs, they play different notes. These smart piano ladders, which attract attention, were preferred 66% more than other ladders. Associating its brand with entertainment, Volkswagen has succeeded in demonstrating an important marketing tactic.



Reference: [www.youtube.com](http://www.youtube.com) (3)

Bridgestone tire brand has positioned its tires as “safety tires” in advertisements, thus trying to create the impression that the brand adopts safe driving. Within the scope of this promotion, the intellectual and emotional dimensions of experiential marketing were emphasized. It has been emphasized that the need to be careful in traffic, and the need to protect the family and loved ones emotionally by wearing seat belts and tires.



Reference: [www.youtube.com](http://www.youtube.com) (4)

A slumber party for 100,000 people was held at the IKEA Essex store, following the slogan of a social media group in the UK, "I want to have a pajama party at Ikea". In addition, within this scope, 100 people were given the opportunity to stay overnight in the warehouse. In this party where pillow fights were held and famous people read fairy tales, the participants were provided with a fun and productive night and an interesting experiential marketing activity was put forward.



Reference: [www.evenmag.com](http://www.evenmag.com) (5)

As part of the experiential marketing activity carried out by BBC Earth, the visitors were given the opportunity to see and touch the animals in their natural lives by making use of augmented reality technology. Thanks to this application, which especially attracts the attention of children, it is aimed to reinforce children's love for animals.



Reference: [www.youtube.com](http://www.youtube.com) (6)

The campaign, organized by JetBlue aircraft company to promote direct flights from New York to Palm Springs, was very popular. Within the scope of the campaign, an interesting experience was offered to the visitors. In this experience, accessories for the summer season and free tickets to Palm Springs were placed inside a six-metre by six-metre ice floe, and visitors tried to smash the ice and claim the rewards. Thanks to this interesting experience, the awareness of the Jet Blue brand was tried to be increased.



Reference: [www.eventmarketer.com](http://www.eventmarketer.com) (7)

The Coca-Cola brand is also among the brands that benefit from experiential marketing activities. As part of a campaign, vending machines called "small world machines" were placed in shopping malls in India-New Delhi and Pakistan-Lahore by the Coca Cola brand. These vending machines are designed as machines that allow face-to-face communication between the two countries and allow people to reflect each other's movements, watch their images and work together. With this application, which is quite remarkable, it is aimed to reunite the broken relations between the two countries through virtual means.



Reference: [www.blog.bizzabo.com](http://www.blog.bizzabo.com) (8)

Sensodyne organized an interesting campaign at Potters Field to launch its new version "Sensodyne Complete Protection" and offered visitors an interesting experience. Within the scope of the campaign, three different regions were established. The first zone is the "how sensitive are you" zone, where tooth sensitivity is measured by dentists. The second region is the region where participants take photos and share them on social media. Finally, the third region is the most interesting region, enabling the Guinness World Record-breaking attempt. Here, 232 visitors were given detailed information about dental care. In this experiential marketing activity, more than 6,000 Sensodyne samples were distributed and 200 visitors were tested for tooth sensitivity.



Reference: [www.hotcow.co.uk](http://www.hotcow.co.uk) (9)

### **Conclusion and Evaluation**

In order to make a difference and gain competitive advantage, businesses want to provide a unique experience that appeals to the emotions of their customers and will take an unforgettable place in their memories. The focus of experiential marketing is the consumer's experience rather than the benefits of the products. Although the concept of experiential marketing is not a very old concept, it is an important modern marketing technique that appeals not only to the logic but also to the emotions of the consumers, to analyze the consumers beforehand, to create marketing strategies as a result of this analysis, and to guide the marketing managers in developing goods or services. Within the scope of this study, the theoretical background of the concept of experiential marketing, the basic concepts of experiential marketing, studies on experiential marketing and exemplary brand applications made by various companies are included.

A business has to keep up with the developing and changing conditions in order to survive in the market and gain competitive advantage. In today's modern marketing environment, consumers decide when purchasing a good or service by considering not only its rational but also emotional benefits. Competition conditions are rapidly changing and developing. Now, it is not enough to just meet the essential needs of the people, it is also important to meet the goods and services that make them happy and give them pleasure. The five dimensions of experiential marketing, consisting of emotional, sensory, intellectual, behavioral and relational experience, offer important opportunities to marketing managers about which ways and methods should be used to meet these demands. In the emotional dimension, there is a

phenomenon for the feelings of consumers. In sensory experience, there is an experience for our five sense organs, namely vision, taste, touch, hearing and smell. In the cognitive dimension, more people are expected to solve problems and generate creative ideas. The behavioral dimension focuses on physical experiences. However, relational experience, which includes all four experiences, includes experiences that can be communicated with each other. It is emphasized that the senses are as important as logic in the concept of experiential marketing, which is a marketing activity aimed at meeting customer requests and expectations. As a result of approaching consumers with the five dimensions of experiential marketing that appeals to the senses, the aim of attracting more attention and obtaining more customer satisfaction comes to the fore. Effective marketing strategies to be created within the scope of experiential marketing activities offer significant competitive advantages to marketing managers in terms of increasing the sales of goods and services, contributing positively to corporate reputation, and creating and maintaining customer loyalty.

## REFERENCES

- Abadi, R.; Nursyamsi, I. & Syamsuddin, A. (2020). Effect of customer value and experiential marketing to customer loyalty with customer satisfaction as intervening variable (Case study on gojek makassar consumers), *The Asian Journal of Technology Management*, 13 (1), 82-97.
- Adeosun, L. P. K. & Ganiju, R. A. (2012). “Experiential Marketing: an insight into the mind of the consumer”, *Asian Journal of Business and Management Sciences*, 2 (7), 21-26.
- Altunışık, R.; Torlak, Ö. & Özdemir, Ş. (2006). *Modern pazarlama* (4th edition), Değişim Publications, Sakarya.
- Bağdaş, G. (2013). *İşletmelerde retro pazarlama uygulamalarının müşteri bağlılığına etkileri üzerine bir araştırma* (Master's thesis). Selçuk University, Konya.
- Baştuğ, M. (2018). *Deneyimsel pazarlama ile hizmet kalitesi arasındaki ilişki ve bir uygulama* (Master's thesis). Marmara University, Institute of Social Sciences, Department of Business Administration, Department of Production Management and Marketing, Istanbul.
- Celep, E. (2019). Postmodern pazarlama anlayışı çerçevesinde deneyimsel pazarlamanın müşteri memnuniyeti ve sadakati ile ilişkisinin incelenmesi, *Journal of Selcuk University Institute of Social Sciences*, 2019 (41), 293-301
- Çelik, A. (2013). *Turizmde deneyimsel pazarlama: tur operatörlerine yönelik bir uygulama* (Doctoral thesis). Dokuz Eylül University Institute of Social Sciences, Izmir.
- Çeltek, E. (2010). *Deneyimsel pazarlama unsurlarının otellerin bakış açısı ile değerlendirilmesi: Türkiye’deki 4 ve 5 yıldızlı otel işletmelerinde bir uygulama* (Doctoral thesis). Anadolu University, Department of Tourism and Hotel Management, Eskişehir.
- Datta, V. (2017). “Conceptual study on experiential marketing: Importance, strategic issues and its impact”, *International Journal of Research-Granthaalayah*, 5 (7), 26-30.
- Demirtaş, M. (2017). Limitlerin ötesini deneyimlemek: bir deneyimsel pazarlama çabası örneği olarak Nike Sub 2, *Journal of Kırklareli University Faculty of Economics and Administrative Sciences*, 6(3), 46-57.

Edvardsson, Bo, Enquist Bo & Johnston, Robert (2005). "Cocreating customer value through hyperreality in the prepurchase service experience", *Journal of Service Research*, 8(2), 1-13.

Farias, S. A., Aguiar, E. C., & Melo, F. V. S. (2014). Store atmospherics and experiential marketing: A conceptual framework and research propositions for an extraordinary customer experience, *International Business Research*, 7(2), 87-99.

Furtun, B. (2012). *Bir Deneyimsel pazarlama uygulaması olarak reklam oyunları üzerine bir inceleme* (Master thesis). Sakarya University, Institute of Social Sciences, Department of Business Administration, Sakarya.

Grundey, D. (2008). Experiential marketing vs. traditional marketing: creating rational and emotional liaisons with consumers, *The Romanian Economic Journal*, 11(29), 133-151.

Günay, G. Nazan (2008). *Hizmet pazarlamasından deneyimsel pazarlamaya: bir güzellik merkezinde uygulama*, 13. Ulusal Pazarlama Kongresi: Pazarlamada Yeni Yaklaşımlar Papers Handbook, 25-29 Ekim, Nevşehir University FEAS, 64-72.

Güney, H. & Karakadılar, İ. S. (2015). "Starbucks firmasının deneyimsel pazarlama uygulamalarının incelenmesi", *İ.Ü. Faculty of Business Administration Journal of Business Economics Institute*, 26 (79), 132-155.

Haumer, F.; Kolo, C. & Reiners, S. (2020). The impact of augmented reality experiential marketing on brand equity and buying intention, *Journal of Brand Strategy*, 8(4), 368-387.

Hidayat, A. & Ramadhani, P. (2019). The impact of relationship quality on experiential marketing and customer satisfaction in the case of ticketing online, [2019 IEEE 6th International Conference on Industrial Engineering and Applications \(ICIEA\)](#), 796-799.

Ishara, W. & Gayathree, P. (2020). The role of experiential marketing in retaining the customers of the hospitality industry in Sri Lanka, *International Journal of Business and Management Invention (IJBMI)*, 9(6), 10-19.

Khan, I. & Rahman, Z. (2014). Influence of experiential marketing on customer purchase intention: a study of passenger car market. *Management and Labour Studies*, 39(3), 319-328.

Koç, E. (2013). *Tüketici davranışı ve pazarlama stratejileri, global ve yerel yaklaşım*, Ankara: Seçkin Publications.

- Kotler, P. & Keller, K. L. (2016). *Marketing Management*, New Jersey: Pearson Prentice Hall.
- Kustini, N. (2011). Experiential marketing, emotional branding, and brand trust and their effect on loyalty on Honda motorcycle product, *Journal of Economics, Business, & Accountancy Ventura*, 14(1).
- Liang, J.-L.; Chen, Y.-Y.; Duan, Y.-S. & Ni, J.-J. (2013). Gender differences in the relationship between experiential marketing and purchase intention, *The Journal of International Management Studies*, 8(1), 10-19.
- Liu, K. T. (2012). “Exploration convenience store service quality phenomenon in Taipei by experiential marketing with Kano Model.”, *The Journal of Human Resource and Adult Learning*, 8(1), 175-182
- Maghnati, F.; Ling, K. & Nasermodeli, A. (2012). Exploring the relationship between experiential marketing and experiential value in the smartphone industry, *International Business Research*, 5(11), 169-177.
- Nagasawa, S. Y. (2008). Customer experience management: influencing on human kansei to management of technology, *The TQM Journal*, 20(4), 312-323.
- Nigam, D. A. (2012). “Modeling relationship between experiential marketing, experiential value and purchase intentions in organized quick service chain restaurants shoppers using structural equation modeling approach.”, *Paradigm*, 16(1), 114-123.
- Oliveira, D.; Gonçalves, M. & Sousa, B. (2020). *The Relationship Between Experiential Marketing and Determinants of Quality Service in the Banking Market*, Retrieved from: [https://www.researchgate.net/publication/340886496\\_The\\_Relationship\\_between\\_Experiential\\_Marketing\\_and\\_Determinants\\_of\\_Quality\\_Service\\_in\\_the\\_Banking\\_Market](https://www.researchgate.net/publication/340886496_The_Relationship_between_Experiential_Marketing_and_Determinants_of_Quality_Service_in_the_Banking_Market). Date of Access: 15.08.2021.
- Pine, J. & Gilmore, J. (1998). Welcome to the experience economy, *Harvard Business Review*, 97-105.
- Pratminingsih, S.; Astuty, E. & Widyatami, K. (2018). Increasing customer loyalty of ethnic restaurant through experiential marketing and service quality, *Journal of Entrepreneurship Education*, 21(3), 1-11.

- Schmitt, B. H. (1999). Experiential marketing. *Journal of Marketing Management*, 15. 53-67.
- Srivastava, R. K. (2008). "How experiential marketing can be used to build brands- a case study of two specialty stores", *Innovative Marketing*, 4 (2), 70-76.
- Tavares, F.; Santos, E.; Diogo, A., & Ratten, V. (2020), An analysis of the experiences based on experimental marketing: Pandemic Covid-19 quarantine, *World journal of Entrepreneurship, Management and Sustainable Development*, 16(4), 327-340.
- Tsaur, Chiu & Wang (2007). The visitors behavioral consequences of experiential marketing, an empirical study on Taipei Zoo, *Journal of Travel & Tourism Marketing*, 21(1), 47-64.
- Türk, Z. (2020). Deneyimsel pazarlama uygulamalarının telekomünikasyon şirketi kullanıcıları açısından algılanma farklılıklarına yönelik bir araştırma, *Firat University, The Journal Of International Social Sciences*, 30(1), 329-340.
- Uygur, S.M. & Doğan, S. (2013). Deneyimsel pazarlamanın müşteri memnuniyeti üzerine etkisi: Restoranlar üzerine bir araştırma, *Dumlupınar University Journal of Social Sciences*, 37, 33-48.
- Verma, Y. ve Jain, V. (2015). How experiential marketing is used in Indian luxury hotels? *Romanian Journal of Marketing: Bucharest*, 1, 2-11.
- Wahyono, W. ve Nurjanah, U. (2020). Building customer loyalty through strategy experiential marketing, service quality, and customer satisfaction, *Management Analysis Journal*, 9(2), 122-131.
- Yang, C.; Y. (2009). The study of repurchase intentions in experiential marketing -an empirical study of the franchise restaurant, *International Journal of Organizational Innovation*, 2(2), 245-261.
- Yeşilot, F. & Dal, N. (2019). Müşteri deneyimi oluşturma ve deneyimsel pazarlama: ıyaşpark alışveriş merkezi (avm) müşterileri ile bir araştırma, *Mehmet Akif Ersoy University -Journal of Applied Sciences*, 3(2), 263-296.
- Yetiş, Ş.A. (2015), Termal otel işletmelerinde deneyimsel pazarlama yaklaşımı, Karamanoğlu Mehmetbey University, *Journal of Social and Economic Research*, 17 (29), 90-98.

Yuan, Y.; Erin, W. & Chihkang, K. (2008). Relationships among experiential marketing, experiential value and customer satisfaction, *Journal of Hospitality & Tourism Research*, 32(3), 387-410.

### Image List

- (1) <http://www.rafineri.net/fanzineri/?m=201205&paged=2>
- (2) <https://www.redbull.com/int-en/super-bowl-gopro-ad-felix-baumgartner-jump-video>
- (3) [https://www.youtube.com/watch?\(Wolswagen\)](https://www.youtube.com/watch?(Wolswagen))
- (4) <https://www.youtube.com/watch?v=erDmOol1Ojs>
- (5) <http://www.evenmag.com/ikea-buyuk-pijama-partisi-12100.html>
- (6) <https://www.youtube.com/watch?v=fv71Pe9kTU0&t=41s>
- (7) <https://www.eventmarketer.com/article/palm-springs-stages-the-ultimate-ice-breaker-in-new-york>
- (8) <https://blog.bizzabo.com/experiential-marketing-examples>
- (9) <http://www.hotcow.co.uk/portfolio/sensodyne-case-study.htm>

## THE MEDIATING ROLE OF PSYCHOLOGICAL RESILIENCE IN THE EFFECT OF ORGANIZATIONAL IDENTIFICATION ON JOB SATISFACTION

by Zişan Duygu Alioğulları, Erzurum Technical University, [zisan.aliogullari@erzurum.edu.tr](mailto:zisan.aliogullari@erzurum.edu.tr)

**Abstract:** The primary aim of this study is to examine the relationships among organizational identification, job satisfaction and psychological resilience and their effects on each other. In the empirical part of this study, firstly the research model based on the relationships among the variables addressed was established and hypotheses were formulated. Then data were gathered through question forms from a total of 85 employees of a private sector firm in Rize of Turkey. According to the results of the analyses, it was found that psychological resilience has a mediation effect in the relationship between organizational identification and job satisfaction.

**Keywords:** Organizational identification, Job satisfaction, Psychological resilience.

### 1. Introduction

In today's working life, where competition, gaining power and growth are much more difficult for organizations, it has become even more important for employees to establish close relations with their organizations and play an active role in their organizations. Managers who want to gain competitive advantage have sought to find new working models for their employees to adapt to the organization and organizational culture. In this context, many concepts such as organizational citizenship, organizational commitment, organizational image and organizational identification, which deal with the relationship of employees with their organizations, have been brought to the literature. Organizational identification, which is one of these concepts, means that the employee acts in harmony with the identity and values of the organization (Shamir & Kark, 2004). It is clear that employees who identify with their organization and see themselves as a part of the organization will be more pleased and satisfied with their jobs.

It has become more important than ever to coordinate and control employee behavior and work in harmony with the organization in organizations that have adopted a flexible working system. It is expected that the level of satisfaction of the employee who adapts to the new working order, new rules and new practices in the pandemic will also be high. Therefore, the concept of organizational identification, which reflects the quality of its relationship with the

organization, is a desired situation by organizations. In addition, it has been proven by studies that pandemic conditions create stress and pressure on the employee and cause the employees to be psychologically worn out and exhausted (Sayin & Bozkurt, 2021). The concept of psychological resilience, which reflects the individual's desire to recover and heal himself in stressful situations, not lose his morale despite all the difficulties, has become a popular skill that employees should acquire. For this reason, organizational management and leaders should help their employees to be psychologically sound and take the necessary steps for this.

As a result, there is a need for a study investigating the effect of psychological resilience on the effect of organizational identification on job satisfaction. The aim of this study is to investigate whether the psychological resilience of employees has a mediating role in the effect of organizational identification on job satisfaction.

## 2. Literature Review and Theoretical Framework

**Organizational Identification:** Organizational identification is the degree of similarity between the concepts that an individual uses to describe himself and the concepts he uses to describe his organization (Kerse & Karabey, 2017). The high level of organizational identification of an employee indicates that his/her self is highly dependent on organizational membership (Koçel, 2014). If the membership of the organization has gained a central place in the individual's self and has become more important than his membership in other social groups, this person is highly identified with the organization. Bitmiş et al. (2013) have determined that psychological resilience affects organizational identification positively and worker exhaustion negatively. In this study, organizational identification is positively related to psychological resilience. The hypothesis formulated is as follows:

*H<sub>1</sub>: Organizational identification is positively related to psychological resilience.*

In the study conducted by Karanika-Murray (2015) and Newton and Teo (2014), it was found that job satisfaction has a positive and significant relationship on organizational identification. Organizational identification can help to understand a range of work behaviors, including turnover (Abrams et al., 1998), commitment (Cole and Bruch, 2006). Van Knippenberg and Van Schie (2000) and Loi et al. (2014) further suggested that organizational identification

should be positively related to job satisfaction. Consistent with the literature, our first hypothesis is:

*H<sub>2</sub>: Organizational identification is positively related to job satisfaction.*

**Job Satisfaction:** Job satisfaction is the positive emotional state that an employee feels as a result of his job and his experience in the workplace (Riggle et al., 2009). Luthans (1992) defines job satisfaction as “the state of an employee whether he is satisfied with his job or not”. Employees with high job satisfaction have positive feelings towards their jobs.

Haar and Staniland (2016) found that psychological resilience to be positively associated with career satisfaction. Ghandi, Hejanzy, and Ghandi (2017) found a positive association between resilience and job satisfaction. They further stated that high-resilient employees reported better self-esteem and had better control over work in times of adversity, which is related to higher efficiency and better productivity. Consistent with the literature, our first hypothesis is:

*H<sub>3</sub>: Psychological resilience is positively related to job satisfaction.*

**Psychological Resilience:** Psychological resilience is defined as adapting to stressful situations, being functional despite stress and difficulties, and self-roundup and improvement after stressful experiences (Carver, 1998; Tusaie & Dyer, 2004; Smith et al, 2008). Individuals with high levels of psychological resilience can get out of the mood caused by negative experiences in a short time and return to their normal lives. In the literature review, no research was found on the variables of resilience, job satisfaction and organizational identification. Based on the information in the literature, the following hypothesis was formed:

H<sub>4</sub>: Psychological resilience moderates in the effect of organizational identification on job satisfaction.

### 3. Research Sample and Measures

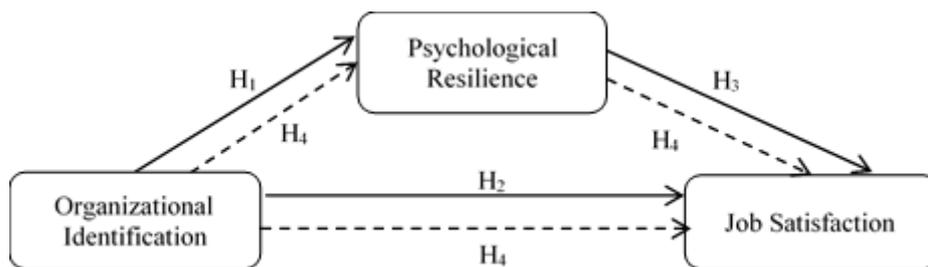
The survey was carried out on a sample consisted of employees of a private firm in one of the provinces in Rize of Turkey. Simple random sampling technique was applied. 85 employees of firm participated in the survey. The sample size is 104 employees. Thus, the sample size is

big enough to represent the population of the study. Question form was used to collect data from the respondents in the sample and data were obtained by the researchers through face to face interviews. The question form consisted of measures used in past studies by many researchers and these measures were proven to have high reliability and validity.

*Organizational identification* was measured with one-dimensional 6-item scale developed by Mael ve Ashforth (1992).

*Psychological resilience* was measured with Smith et al. (2008) one-dimensional and 6 item scale.

*Job satisfaction* was measured with 6 items by Agho, Price ve Müller (1992). All scales are 5-point Likert type scales (1-certainly do not agree.....5- certainly do agree). The research model is given Figure 1.



**Figure 1: The Research Model**

#### **4. Analyses and Findings**

Before the research model test, the average and standard deviation values and correlations between variables were calculated through the SPSS 21.0 program. After data collection, the normality values of the data were examined and it was seen that all data showed normal distribution.

When the employees participating in the study were evaluated in terms of age, it was seen that the 18-25 age range had the highest frequency (60%). It was also found that male employees (58.8%) outnumbered female employees and most of the employees were married (60%). When the educational status of the employees was evaluated, it was found that university graduates constituted 51.8% of the sample. In addition, 80% of the employees who participated in the

study have any administrative duties in the company. In terms of longevity, the percentage of employees who have been working in the company for less than 1 year was 44%.

Exploratory factor analysis (EFA) of the research variables was performed and the results are shown in Table 1.

**Table 1: Explanatory Factor Analysis of Research Variables**

Scales	Items	Factor Loading	Described Variance	Self Value	C. Alpha
Organizational Identification	When someone praises my business, it feels like a personal compliment..	.785	52.34	2.617	0.761
	When I talk about my business, I usually say 'we' rather than 'they'	.781			
	I am very interested in what others think about (my business).	.752			
	My business's successes are my successes.	.686			
	When someone criticizes (my business), it feels like a personal insult	.596			
<i>Kaiser-Meyer-Olkin Measure of Sampling Adequacy: 0.795 Approx. Chi-Square: 99.611 Barlett's Test of Sphericity: 0.000 Extraction Method: Principal Components Component Matrix Total of Described Variance: 52.34 Cronbach's Alpha: 0.761</i>					
Psychological Resilience	I tend to bounce back quickly after hard times.	.856	70.520	2.116	0.789
	It does not take me long to recover from a stressful event.	.835			
	I usually come through difficult times with little trouble.	.828			
<i>Kaiser-Meyer-Olkin Measure of Sampling Adequacy: 0.705 Approx. Chi-Square: 73.024 Barlett's Test of Sphericity: 0.000 Extraction Method: Principal Components Component matrix Total of Described Variance: 70.520 Cronbach's Alpha: 0.789</i>					
Job Satisfaction	I find real enjoyment in my job.	.795	50.426	3.026	.792
	I like my job better than the average person.	.792			
	I am seldom bored with my job.	.759			
	I would not consider taking another kind of job.	.681			
	Most days I am enthusiastic about my job.	.665			
	I feel fairly well satisfied with my job.	.534			
<i>Kaiser-Meyer-Olkin Measure of Sampling Adequacy: 0.760 Approx. Chi-Square: 159.493 Barlett's Test of Sphericity: 0.000 Extraction Method: Principal Components Varimax. Total of Described Variance: 50.426 Cronbach's Alpha: 0.792</i>					

As seen in Table 1, factor loads of organizational identification, psychological resilience and job satisfaction variables were determined within the limits accepted in the literature (0.45) and in accordance with factor analysis. All the scales in the study were collected in one dimension and show parallelism with the literature. The reliability values of the variables are also above the limits accepted in the literature. In this context, it was seen that the validity and reliability of the scales were ensured.

The results of the correlation analysis performed to observe the relationship between the research variables are as in Table 2. It is more likely to perform moderator or mediator analyzes between variables with significant correlation values. In this context, mediator analysis was performed between all variables with significant correlation values

**Table 2: Correlation Values of The Scales Used in The Research.**

	1	2	3	Mean (X)
<b>1. Organizational Identification</b>	1	.556**	.542**	3,7482
<b>2. Psychological Resilience</b>		1	.511**	3,7824
<b>3. Job Satisfaction</b>			1	3,6510

\*p<0,05; \*\*p<0,01.

As seen in Table 2, there is a direct relationship between organizational identification and psychological resilience ( $r = .556$ ) and job satisfaction ( $r = .542$ ) at a 99% significance level. In addition, there is a positive and significant relationship between the psychological resilience and job satisfaction ( $r = .511$ ). The relationship between organizational identification and psychological resilience is stronger than the relationship with other scales. It is observed that the mean values of the variables are above averages values.

A regression analysis based on the bootstrap technique was conducted to test the mediating role of psychological resilience in the effect of organizational identification levels of business employees on their perceptions of job satisfaction. It is claimed that the bootstrap technique, which has been used frequently in recent years, provides more reliable results than the Baron and Kenny (1986) method (Gürbüz, 2019; Hayes, 2013). Bootstrap technique, the values at the 95% confidence interval (CI) obtained through the analysis should not include the zero (0) value (Manly, 2006). According to analysis results, the lower and upper confidence interval (CI) values obtained by the percentage method as a result of the bootstrap analysis do not include the 0 (zero) value. In this context, research analyzes were made with the Process Macro program developed by Hayes (2018). The results of the regression analysis are shown in Table 3.

**Table 3. Regression analysis results for the mediation test (N:85, Model 4)**

Prediction Variables	Result Variables			
	M (Psychological Resilience)		Y (Job Satisfaction)	
	b	S.D.	b	S.D.
X (Organizational Identification)	.648***	.106	.309***	.088
M (Psychological Resilience)	-	-	.216***	.076
Constant	1.222***	.408	1.835***	.297
	R <sup>2</sup> = .309		R <sup>2</sup> = .357	
	F (1: 83) = 37.20; p < .001		F (2: 82) = 22.724; p < .001	

\*p < .05, \*\*p < .01, \*\*\*p < .001; S.D.: Standard Deviation.

Note: Unstandardized beta coefficient (b) values are reported. R<sup>2</sup> values show the variance explained.

According to Table 3, it is observed that organizational identification (X) affects psychological resilience (M) significantly and positively ( $b = .648$ , 95% CI [.4367, .8595],  $t = 6.0991$ ,  $p < .001$ ). Organizational identification explains approximately 30.95% ( $R^2 = .3095$ ) of

the variation in psychological resilience. This result shows that the 31% variance in the level of organizational identification is explained by the level of psychological resilience of the employee. In this direction, the  $H_1$  hypothesis, which shows the significant effect of organizational identification on psychological resilience, was accepted. In addition, it has been observed that the direct effect of organizational identification (X) on job satisfaction (Y) is significant. The effect of organizational identification on job satisfaction was found to be positively significant ( $b = .309$ , 95% BCA CI [.1332, .4850],  $t = 3.4959$ ,  $p < .001$ ). As a result of the bootstrap analysis, the adjusted bias and accelerated confidence interval values (BCA CI) do not contain 0 value's. In line with these results, the  $H_2$  hypothesis was accepted.

The effect of psychological resilience on job satisfaction was found to be significant and positive ( $b = .216$ , 95% CI [.0650, .3669],  $t = 2.845$ ,  $p < .001$ ). Therefore, the  $H_3$  hypothesis was accepted. However, organizational identification and psychological resilience variables explain approximately 35.6% ( $R^2 = .3566$ ) of the variation in job satisfaction. When the combined effects of psychological resilience (M) as a mediating variable and organizational identification (X) on job satisfaction (Y) as a result variable were examined, it was seen that the mediating effect of psychological resilience variable on the effect of organizational identification on job satisfaction was significant ( $b = .140$ , %, 95 CI [.0441, .2601]). As a result, hypothesis  $H_4$  was accepted. The fully standardized effect size of the mediation effect ( $K^2$ ) is 0.169 and it is observed that this value exhibits an effect size close to the high value.

## 5. Conclusion and Discussions

In today's business world where competition is fierce, businesses want to be one step ahead of their competitors and maintain their existence. Organizational identification, which is defined as the employee's adopting the goals and values of the organization, seeing his success as his own success, acting and behaving in this direction, plays an important role in achieving organizational success. Especially in pandemic conditions, in the new normal working order, where the contact with the outside world is reduced, flexible working is shifted and the known classical management approaches are lost, the biggest advantage of the enterprises is the human resource, which is the internal factor. Organizational identification, which shapes the behavior of employees and is expressed as “the adoption of the organization in many aspects” (Kerse & Karabey, 2017), has become important for organizations. Employees who identify with their organizations see themselves as a part of their organization and find their work more meaningful. Studies have shown that employees who identify with their organizations have

high job satisfaction levels (Van Knippenberg and Van Schie, 2000; Loi et al. 2013). In the new normal working order brought by Covid 19, it is an undeniable fact that employees are psychologically affected negatively. In this period, managers should focus on making their employees feel good psychologically as well as ensuring that they are in harmony with the organization. In this period, psychological resilience, which is expressed as an individual's ability to successfully overcome negative conditions and adapt to a new situation (Tusaie & Dyer, 2004; Smith et al, 2008), is an important factor for employees.

In this study, the  $H_1$  hypothesis, which suggests that organizational identification has a positive effect on resilience, was supported. Accordingly, individuals who are in harmony with their organizations will feel more resilient and less stressed against negative situations. The result obtained shows parallelism with the findings of the studies in the literature (Bitmiş et al., 2013). In addition, the  $H_2$  hypothesis, which suggests that organizational identification has a significant effect on job satisfaction, was also supported. In other words, the employee's identification with the organization enables him to enjoy his work and find his work meaningful. The result obtained is in parallel with the findings of the studies in the literature (Van Knippenberg and Van Schie, 2000; Loi et al. 2014). According to another research result, the  $H_3$  hypothesis, which measures the effect of psychological resilience on job satisfaction, was also supported. In the pandemic conditions, where psychological and mental resilience is at the forefront, the resilience of the employees and the feeling of well-being cause them to be more satisfied with their work. The result obtained is in parallel with the findings of the studies in the literature (Haar and Staniland, 2016; Ghandi, Hejanzy, and Ghandi, 2017).

As a result of the regression analysis, it was seen that psychological resilience had a mediating effect on the effect of organizational identification on job satisfaction. Accordingly, the  $H_4$  hypothesis was supported. Therefore, employees who feel psychologically strong and resilient will reduce the stress and pressure on them, increase their level of organizational identification, and be more satisfied with their jobs.

This study focused on the effect of psychological resilience on the effect of organizational identification, which is an important deficiency in the literature, on job satisfaction. In this respect, the study is an original research. Under normal conditions, it is expected that individuals who identify with their organizations have high job satisfaction levels. The negative conditions brought by the pandemic, health problems and a new world order have brought workers face to face with unexpected difficulties and problems. As a result of the research, it

has been seen that the ability of the identical employee to cope with and struggle with difficulties has an effect on the level of job satisfaction ( $K^2 = .169$ ). In summary, organizational identification, which is an organizational factor, is effective on employee satisfaction with his job. In addition, it has been determined that the psychological resilience of the employee, which is an internal factor, is also very important in the high level of job satisfaction ( $R^2 = .216$ ;  $R^2 = .356$ ).

In this case, it has been seen that the effect of identification in the management organization literature on job satisfaction is more effective under normal conditions, and different variables play an active role in the relationship between identification and job satisfaction in unpredictable and unmanageable conditions. Based on the research findings, some suggestions can be made for practitioners:

- 1- Applications that support the quality of life of the employees should be developed, taking into account the physical, mental and psychological health of the employees.
- 2- Psychological support can be given to employees. Employee psychology should be taken into account in the decisions to be taken and the steps to be taken.
- 3- Outstanding applications such as coaching and private lessons for physical activity can be developed.

This study has some limitations. First, the geographic span of the study was restricted to Turkey. Therefore, future studies should consider a larger geographical span so that stronger generalisations of the results can be made. Second, the study collected samples from private sector only, and other sectors need to be examined to gauge the role of psychological resilience in the organizational identification-job satisfaction relationship. Third, future researchers should assess the relationship between other demographic variables, such as income and tenure, and the stated study variables.

## References

- Abrams, D., Ando, K., & Hinkle, S. (1998). Psychological Attachment to The Group: Cross-cultural Differences in Organizational Identification and Subjective Norms As Predictors of Workers' Turnover Intentions. *Personality and Social Psychology Bulletin*, 24(10), 1027-1039.
- Agho, A. O., Price, J. L., & Mueller, C. W. (1992). Discriminant Validity of Measures of Job Satisfaction, Positive Affectivity and Negative Affectivity. *Journal of Occupational and Organizational Psychology*, 65(3), 185-195.
- Bewley, T. (1999). Work motivation. Federal Reserve Bank of St. *Louis Review*, 81, 35-49.
- Bitmiş, M. G., Sökmen, A. ve Turgut, H. (2013). The Effect of Resilience on Burnout: The Mediating Role of Organizational Identification. *Gazi University Journal of IIBF*, 15(2):27-40.
- Carver, C. S. (1998). Resilience and Thriving: Issues, Models, and Linkages. *Journal of Social Issues*, 54, 245-266.
- Cole, M. S., & Bruch, H. (2006). Organizational Identity Strength, Identification, and Commitment and Their Relationships to Turnover Intention: Does Organizational Hierarchy Matter?. *Journal of Organizational Behavior*, 27(5), 585-605.
- Ghandi, P., Hejazi, E., Ghandi, N. (2017). A Study on The Relationship Between Resilience and Turnover Intention: With An Emphasis on The Mediating Roles of Job Satisfaction and Job Stress. *Bulletin de la Société Royale Des Sciences de Liège*, 86, 189-200.
- Gürbüz, S. (2019). *AMOS ile Yapısal Eşitlik Modellemesi, Temel İlkeler ve Uygulamalı Analizler*. Ankara: Seçkin Press.
- Haar, J. & Staniland, N. (2016). The Influence of Psychological Resilience on The Career Satisfaction of Māori Employees: Exploring the Moderating Effects of Collectivism. *New Zealand Journal of Human Resources Management*, 16, 58-72.
- Hayes, A. F. (2013). *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*. New York: Guilford Press.

- Karanika-Murray, M., Duncan, N., Pontes, H. M., & Griffiths, M. D. (2015). Organizational Identification, Work Engagement, and Job Satisfaction. *Journal of Managerial Psychology*, 30(8), 1019-1033.
- Kerse, G., & Karabey, C. N. (2017). Algılanan Örgütsel Desteğin Örgütsel Özdeşleşmeye Etkisi: Örgütsel Sinizmin Aracı Rolü. *MANAS Sosyal Araştırmalar Dergisi*, 6(4), 375-398.
- Koçel, T. (2014). *İşletme Yöneticiliği* (15.Baskı). İstanbul: Beta Basım Yayım Dağıtım A.Ş.
- Loi, R., Chan, K. W., & Lam, L. W. (2014). Leader–Member Exchange, Organizational Identification, And Job Satisfaction: A Social Identity Perspective. *Journal of Occupational and Organizational psychology*, 87(1), 42-61.
- Luthans, F. (1992). *Organizational Behavior* (6th Edition). New York: Mc Graw-Hill Press.
- Mael, F., & Ashforth, B. E. (1992). Alumni and Their Alma Mater: A Partial Test of The Reformulated Model of Organizational Identification. *Journal of organizational Behavior*, 13(2), 103-123.
- Manly, B. F. (2006). *Randomization, bootstrap and Monte Carlo methods in biology*. United State of America: CRC Press.
- Newton, C., & Teo, S. (2014). Identification and Occupational Stress: A Stres-Buffering Perspective. *Human Resource Management*, 53(1), 89-113.
- Riggle, R. J., Edmondson, D. R. & Hansen, J. D. (2009). A Meta-Analysis of The Relationship Between Perceived Organizational Support and Job Outcomes: 20 Years of Research. *Journal of Business Reserach*, 62, 1027-1030.
- Sayin, Ö. & Bozkurt, V. (2021). *Nationalism, Globalization and the Pandemic: Experience of Turkey*. (Edit: Hakan Gülerce, Vahid Nimehchisalem et al.) In: Society in the Covid-19 Pandemic: Inequalities, Challenges and Opportunities. Ankara: Pegem Publishig.
- Shamir, B., & Kark, R. (2004). A Single-Item Graphic Scale for The Measurement of Organizational Identification. *Journal of Occupational and Organizational Psychology*, 77(1), 115-123.

- Smith, B. W., Dalen, J., Wiggins, K., Tooley, E., Christopher, P., & Jennifer Bernard, J. (2008). The Brief Resilience Scale: Assessing the Ability To Bounce Back. *International Journal of Behavioral Medicine*, 15, 194-200.
- Tusaie, K., & Dyer, J. (2004). Resilience: A historical Review of The Construct. *Holistic Nursing Practice*, 18, 3-8.
- Van Knippenberg, D. , van Dick, R. and Tavares, S. (2005). Social Identity and Social Exchange: Identification, Support, and Withdrawal From The Job, ERIM Report Series Research in Management (ERS-2005-093-ORG), *Erasmus Research Institute of Management (ERIM)*, Erasmus University, Rotterdam.

## THE RELATIONSHIP BETWEEN ORGANIZATIONAL TRUST AND ORGANIZATIONAL COMMITMENT: AN APPLICATION IN THE BANKING SECTOR

by Nagehan Öner, Independent Researcher, [kasilng@yahoo.com](mailto:kasilng@yahoo.com)

**Abstract:** In this study, the relationship between organizational trust, which will affect long-term organizational success, and organizational commitment, which causes employees to work in the organization for a long time, has been tried to be determined. In this context, a survey study was conducted with the participation of employees in banks operating in Erzurum, Turkey. Quantitative method was adopted in the research and data were collected by questionnaire technique. The obtained data were analyzed using the SPSS package program. In the research, reliability analysis, exploratory factor analysis, correlation analysis, simple linear regression analysis were applied. In the study, in which a total of 132 employees participated, it was determined that the organizational trust factor had a significant and positive effect on the organizational commitment factor. According to this result, the sense of trust of the bank employees participating in the research increases their commitment to the organization. In addition, it was seen that the factors of trust in the organization and the manager affected the factors of affective commitment, continuance commitment and normative commitment in a meaningful and positive way. For this reason, it is very important to develop the trust in the organization and the manager in ensuring the loyalty of the employees to the business.

**Keywords:** Organizational trust, Organizational commitment, Banking.

**Note:** This study is derived from the master's thesis titled "The Relationship Between Organizational Trust and Organizational Commitment-An Application in the Banking Sector" prepared by Nagehan Kasil on 16.08.2010 at Atatürk University, Institute of Social Sciences, Department of Business Administration.

### INTRODUCTION

When we look at the values of the prominent organizations of today's business life, the presence of qualified employees in addition to the technical opportunities they have is remarkable. Having talented, willing and productive employees for a long time and successfully managing this resource is very important for organizations to continue their activities. While managing qualified employees, ensuring that they trust the organization and their managers is an important factor in the way employees do business in line with the interests of the organization and reach

organizational goals. In addition, the positive development and continuity of inter-organizational human relations may vary depending on the existence of mutual trust between employees.

Relationships based on trust can improve the behavior, attitudes, motivation and performance of the employees in the work environment, while at the same time, they can improve the sense of commitment to the organization by preventing negative feelings that will make them think of leaving the organization. Strengthening the commitment of qualified employees to the organization, in a way, means the continuity of the successful activities of the organization. It is not difficult to understand how important it is for qualified employees to serve the organization for a long time, considering that the employees are the real source of the job.

In this study, in which the relationship between organizational trust and organizational commitment is investigated, firstly, theoretical information about the concepts is given. Afterwards, the relationship between organizational trust and organizational commitment was determined and the effect of organizational trust on organizational commitment was explained.

## **1. ORGANIZATIONAL TRUST**

Trust is one of the most prominent factors in the continuity of relationships between organizations, groups and people. This concept emerges as a variable that affects most of the relations between the parties, such as communication and conveying information in the most accurate way, solving problems, giving authority, sharing goals and responsibilities (Yazıcıoğlu, 2009: 237).

According to Luhmann, the concept of organizational trust is the commitment of employees to the organization with a strong desire for commitment and their adoption of the goals and values of the organization. Greenberg, on the other hand, defines organizational trust as employees' emotional attachment to the organization, sharing the goals and values of the organization, and being willing to work continuously in the organization (Perry and Mankin, 2007: 167).

In the literature, organizational trust is discussed in two sub-dimensions: trust in organization and trust in manager. These dimensions can be briefly explained as follows:

*-Trust in Organization:* Individuals' expectations from the network of organizational relations and behaviors (Shockeley-Zalabak et al., 2000); In other words, it is defined as the belief that

the individual's organization will take actions for his own benefit, or at least that these actions will not harm him (Gambetta, 1988. cited in: Polat, 2009: 14).

*-Trust in Manager:* Mayer et al. (1995), it is defined as "the employee's willingness to be exposed to the behaviors and actions of his manager that he cannot control", in another definition, trust in the manager is defined as the belief that the manager will keep his words and be truthful, and the feeling of support and commitment expected from the manager (Gilbert & Tang, 1998).

## **2. ORGANIZATIONAL COMMITMENT**

Organizational commitment, which has a psychological dimension, is a behavior that is shaped by the relationship of employees with the organization and makes them decide to be a permanent member of the organization (Meyer and Allen, 1991: 67), an attitude or orientation towards the organization that attaches the identity of the person to the organization (Sheldon, 1971: 143).

Meyer and Allen (1991) examined organizational commitment in three dimensions as emotional, continuance and normative. These dimensions can be summarized as follows:

*-Emotional Commitment:* It covers the employee's identification and integration with the organization. Employees who stay in the organization with a strong emotional commitment continue to stay in the organization not because they need it, but rather because they want it (Meyer and Allen, 1991: 67).

*-Continuance Commitment:* This type of commitment, which is thought to be based on an economic logic, can be defined as the fact that employees continue to work in that organization because of necessity, as a result of their belief that they will lose their investments and side-benefits if they leave the organization, and they consider the limited job alternatives (Meyer, Allen and Smith, 1993: 539).

*-Normative Commitment:* It is the sense of obligation felt by the employees to maintain organizational membership (Meyer and Smith, 2000: 320). This type of commitment arises as a result of employees' thinking that it is morally right to stay in the organization, regardless of the status or satisfaction that the organization has provided them over the years (Meyer and Allen, 1991: 66). In normative commitment, employees believe that loyalty is important and they feel obligated to do so.

### **3. THE RELATIONSHIP BETWEEN ORGANIZATIONAL TRUST AND ORGANIZATIONAL COMMITMENT**

Studies have shown that trust includes many positive results for organizations and teams. Business relations shaped by trust create cooperation, reduce the rate of conflict, and increase the commitment to the organization and reduce the tendency to leave (Costa, 2003: 105).

Organizational trust occurs as a result of employees being honest, respectful, reliable and fair to each other in their intra-organizational relations. The organizational trust formed in this way also strengthens the employees' sense of commitment to the organization. As a result of organizational trust, trust in manager and organization, identification with organizational values, organizational support, open communication, organizational commitment based on the sharing of organizational goals and objectives are formed. Similarly, employees' sense of commitment to the organization also increases their sense of trust in the organization. Therefore, it can be said that there is a bidirectional relationship between organizational trust and organizational commitment (Demirel, 2008: 185).

Paine (2007: 102-103) also stated that the assurance given about meeting the demands and needs of the employees in a fair way and supporting them constantly binds the employees to the organization.

Mishra and Spreitzer (1998) suggested that dismissals are considered less worrying if the employees' trust in their superiors and the perception of being empowered are high, especially in businesses where there are layoffs (Ergeneli and Ari, 2005: 128).

In times of change, information sharing is much more important than in ordinary periods. In large-scale change processes, it is seen that some senior managers decide to hide the information, and middle-level managers hide their information for fear of losing their power or importance. By contrast, those who work in an organization where senior leaders impart information as early and honestly as possible and hold managers accountable for conveying information downstream feel valued and important. Employees from whom information is hidden cannot establish a bond with their organizations (Barutçugil, 2004: 390). Employees who feel worthless and are worried that something is being hidden from them cannot be expected to trust their managers and organizations. It is impossible for employees with a lack of trust to stay in the organization for a long time in such a situation.

Ensuring employees' participation in management also has an effect on improving employees' feelings of trust and increasing their loyalty. Employees will feel that their managers trust them, and as a result, they will begin to trust their managers. Employees who trust their organization and managers and feel that they are trusted will embrace their work and aim to be more successful.

In line with the data obtained as a result of the literature research, the hypotheses of the research were formed as follows:

H1: There is a similar and significant relationship between the employees' trust towards the business and their commitment to the business.

H2: Organizational trust factors positively affect organizational commitment factors. This research hypothesis is divided into the following sub-hypotheses:

H2a: Trust in management positively affects emotional commitment,

H2b: Trust in management negatively affects continuance commitment,

H2c: Trust in management positively affects normative commitment,

H2d: Trust in organization positively affects emotional commitment,

H2e: Trust in organization negatively affects continuance commitment,

H2f: Trust in the organization positively affects normative commitment.

## **4. METHODOLOGY**

### **4.1. Research Population**

The universe of the research consists of branch employees of 18 different banks operating in Erzurum city center. By applying to the regional directorate of the banks that have a regional directorate in Erzurum city center, and by visiting each branch of the banks that do not have a regional directorate, the number of employees representing the main mass was determined as approximately 500 people. The sample size to be selected from this population was calculated as 217 by predicting a 5% margin of error at the 95% confidence level (Saunders, Lewis and Thornhil, 2003: 156). Out of 220 distributed questionnaires, 132 were collected. The return rate of the surveys is 60%.

#### **4.2. Data Collection Tools**

Questionnaire form was used as data collection tool in the research. The survey consists of two parts. The first part is aimed at identifying demographic variables. In the second part, statements containing trust and loyalty scales are listed, respectively. Nyhan and Marlow (1997)'s "organizational trust inventory" was used to measure organizational trust. The organizational commitment of the employees was measured using the "organizational commitment scale" developed by Meyer and Allen (1991) and widely used in the literature. Five-point Likert scale was used in all of the mentioned measurement tools.

The reliability of the scales was determined by the Cronbach alpha coefficient, which shows the internal consistency and homogeneity of the items in the scales. The reliability coefficient of the organizational trust scale was 0.882 and the reliability coefficient of the organizational commitment scale was 0.869.

#### **4.3. Analysis Methods**

In the research, reliability analysis, exploratory factor analysis, correlation analysis, simple linear regression analysis were applied. These analyzes were made with the SPSS package program.

#### **4.4. Findings**

55.3% of the participants are male, 50% are between the ages of 21-30, 57.6% are married, 56.8% are university graduates, 43.2% have a seniority of 1-5 years, It was determined that 45.5% of them were civil servants.

According to the results of the simple regression analysis for testing the hypotheses, as seen in Table 1, organizational trust as a whole positively affects organizational commitment ( $\beta=.596$ ;  $p<0.01$ ) at the level of importance. In addition, organizational trust explains 35.6% of the total variance of the organizational commitment variable. In other words, organizational trust significantly increases organizational commitment. According to the results of the analysis, the H1 hypothesis was accepted.

**Table 1. The Effect of Organizational Trust on Organizational Commitment**

Dependent Variable \ Independent Variable	Organizational Commitment	
	$\beta$	t
Organizational Trust	,596**	8,473
R <sup>2</sup>	,356	
D.R <sup>2</sup>	,351	
F	71,795**	

\*\*p<0,01

Table 2 shows the effect of organizational trust sub-dimensions on organizational commitment sub-dimensions. According to the results of the analysis, trust in management affects emotional ( $\beta=.325$ ;  $p<0.01$ ) and normative commitment dimensions ( $\beta=.174$ ;  $p<0.01$ ) in a significant and positive way. It was determined that trust in organization positively affects emotional ( $\beta=.497$ ;  $p<0.01$ ) and normative commitment ( $\beta=.373$ ;  $p<0.01$ ) at the meaningful level. It confirms the sub-hypotheses of the H2 hypothesis, H2a, H2c, H2d and H2f.

However, the continuance commitment of the trust in management factor ( $\beta=.217$ ;  $p<0.05$ ) was significantly and positively; it is understood that the factor of trust in organization has a significant and positive effect on continuance commitment ( $\beta=.090$ ;  $p<0.05$ ). Therefore, the hypotheses H2b and H2e, which suggest that trust in management and the organization negatively affect continuance commitment, were rejected.

**Table 2. The Effect of Organizational Trust Dimensions on Organizational Commitment Dimensions**

Dependent Variable \ Independent Variable	Emotional Commitment		Continuance Commitment		Normative Commitment	
	$\beta$	t	$\beta$	t	$\beta$	t
Trust In Management	,325**	4,646	,217*	2,289	,174**	2,013
Trust In Organization	,497**	7,107	,090*	,947	,373**	4,302
R <sup>2</sup>	,498		,073		,228	
D.R <sup>2</sup>	,490		,059		,216	
F	63,973**		5,080*		19,071**	

\*\*p<0,01

## Conclusion

In this study, which was carried out with the participation of employees of different bank branches operating in the city center of Erzurum, in order to examine the relationship between organizational trust and commitment, according to the findings, whether there is a relationship between trust in organization and trust in manager and emotional commitment, continuance commitment and normative commitment; It has been determined whether the trust of the employees to the organization and the manager affects their organizational commitment.

As the literature suggests, it was found in the study that organizational trust had positive effects on organizational commitment and that an increase/decrease in the level of organizational trust would lead to an increase/decrease in the level of organizational commitment. Based on this result, our H1 hypothesis was accepted. According to this result, it is very important to develop the trust in the organization and the manager in ensuring the commitment of the employees to the business.

As a result of the research, the sub-hypotheses of the H2 hypothesis, H2a, H2c, H2d and H2f, were confirmed by the determination of a significant effect of organizational trust factors on emotional and normative commitment factors from organizational commitment factors. On the other hand, H2b and H2e hypotheses, which claim that there is no relationship between organizational trust factors and continuance commitment, were rejected as a result of the detection of a positive and same-sided relationship between organizational trust factors and continuance commitment factor.

When the effect of organizational trust factors on organizational commitment factors is examined, it is seen that organizational trust factors affect the emotional and normative commitment factors of organizational commitment more than the continuance commitment factor. This is an expected result. Because, in continuance commitment, the employee's continuing to stay in the enterprise is due to the fact that the employee is obliged to stay in the enterprise, rather than the trust of the employee in his organization or manager.

Increasing organizational success and creating efficiency and productivity are of great importance in business life. It is clear that the main factors that will ensure and increase the trust and loyalty of the employees are in the hands of the managers. In this context, managers need to be informed about what these factors are and show the necessary care to their subordinates. Organizational managers should not refrain from fulfilling their duties in gaining

the trust of the employees and ensuring the loyalty of the qualified employees, and they should engage in activities that increase the trust and loyalty of these employees in order to gain competitive advantage.

The fact that the relations between employees and managers in organizations are based on mutual trust will provide the desired level of benefit to both the organization and the employees of the organization in the way of achieving organizational goals. A sense of mutual trust is created, employees are provided with the opportunity to improve themselves and realize their personal goals, effective communication among its employees and activities that greatly increase the motivation of its employees are given importance, fair policies are followed in reward and punishment, in businesses where information sharing is gain the trust of employees and it will undoubtedly be easier to ensure that they stay in the business for a long time.

These results obtained from our study are limited only to bank employees operating in Erzurum province. In order to ensure that the obtained data can be further generalized, it is important to make applications in businesses operating in other cities or in different sectors.

## References

- Barutçugil, İ. (2004). *Stratejik İnsan Kaynakları Yönetimi*. Kariyer Yayıncılık, İstanbul.
- Costa, A. C. (2003). Understanding the Nature and Antecedents of Trust Within Work Teams. In B. Nooteboom, & F. Six (Eds.). *Trust Process in Organizations: Empirical Studies of Determinants and The Process of Trust Development*. E.Elgar Publishing, U.S.A. pp.105-124.
- Demirel, Y. (2008). Örgütsel güvenin örgütsel bağlılık üzerine etkisi: Tekstil sektörü çalışanlarına yönelik bir araştırma. *Celal Bayar Üniversitesi İ.İ.B.F. Yönetim ve Ekonomi Dergisi*, 15(2): 179-194.
- Ergeneli, A. & Arı, G. S. (2005). Krizde işten çıkarmaların banka yöneticileri üzerine etkileri: Örgütsel bağlılık, güven ve güçlendirme algıları. *Ankara Üniversitesi SBF Dergisi*, 60(1): 121-148.
- Gilbert, J. A. & Tang, T. L. (1998). An examination of organizational trust antecedents. *Public Personnel Management*, 27(3): 321-338.
- Meyer, J. P. & Allen, N. J. (1991). A three-component conceptualization of organizational commitment. *Human Resource Management Review*, 1(1): 61- 89.
- Meyer, J. P. & Smith, C. A. (2000). HRM practises and organizational commitment: Test of a mediation model. *Canadian Journal of Administrative Sciences*, 17(4): 319-332.
- Meyer, J. P., Allen, N. J. & Smith, C. A. (1993). Commitment to organizations and occupations: extension and test of a three-component conceptualization. *Journal of Applied Psychology*, 78(4): 538-551.
- Nyhan, R. C. & Marlow, H. A. (1997). Development and psychometric properties of the organizational trust inventory. *Evaluation Review*, 21(5): 614-635.
- Paine, S. C. (2007). *The Relationship Among Interpersonal and Organizational Trust and Organizational Commitment*. (Ph. D. Thesis), Alliant International University.
- Perry, R. W. & Mankin, L. D. (2007). Organizational trust, trust in the chief executive and woric satisfaction. *Public Personnel Management*, 36(2): 165-179.

Polat, S. (2007). Ortaöğretim Öğretmenlerinin Örgütsel Adalet Algıları, Örgütsel Güven Düzeyleri İle Örgütsel Vatandaşlık Davranışları Arasındaki İlişki. Kocaeli Üniversitesi Sosyal Bilimler Enstitüsü, Kocaeli.

Saunders, M., Lewis, P. & Thornhil, A. (2003). Research Methods for Business Students. FT-Prentice Hall.

Sheldon, M. E. (1971). Investments and involvements as mechanisms producing commitment to the organization. Administrative Science Quarterly, 16: 143-150.

Yazıcıoğlu, İ. (2009). Konaklama işletmelerinde işgörenlerin örgütsel güven duyguları ile iş tatmini ve işten ayrılma niyetleri üzerine bir alan araştırması. Elektronik Sosyal Bilimler Dergisi, 8(30): 235-249.

## THE EFFECTS OF COVID-19 PANDEMIC ON THE ELECTRICAL ENERGY CONSUMPTION IN TURKEY

by Fatma Fehime Aydın, Van Yüzüncü Yıl University, [fatmafehimeaydin@yyu.edu.tr](mailto:fatmafehimeaydin@yyu.edu.tr)

**Abstract:** Covid-19, which first appeared in Wuhan, China's Hubei province in December 2019, spread all over the world in a short time, so it was accepted as a pandemic and various restrictions and regulations were made in order to prevent it. Since March 2020, the first cases began to be seen in Turkey and curfew restrictions were introduced without delay. As a result of the curfew restrictions, the time spent at home has increased, and consequently, the energy consumption in the houses has increased. In this study, the effect of the increase in the number of covid-19 cases on electrical energy consumption in Turkey was discussed. For this purpose, firstly descriptive statistics of variables were included in the study, and then unit root tests were applied to understand whether the data were stationary or not. The Autoregressive Distributed Lag (ARDL) model was used to determine the short and long-term relationships between electrical energy consumption and the number of covid-19 cases. As a result of the analysis, a statistically significant relationship was not found between the number of Covid-19 cases and electrical energy consumption in the short term, while a statistically significant positive relationship was found between the exchange rate and electrical energy consumption. In the long run, it is concluded that both variables have a direct relationship with electrical energy consumption. Although it has been determined in most of the studies in the literature that the increase in energy consumption leads to economic growth since it is known that the energy factor is limited in nature, the society should be made conscious of using energy efficiently in order to meet the increasing energy need, and alternative use of renewable energy sources should be pursued.

**Keywords:** Electrical energy consumption, Covid-19, ARDL bounds test.

### 1. Introduction

The Covid-19 pandemic, which first appeared in China, spread all over the world in a very short time and affected all societies economically, politically and socially. The pandemic has shown and continues to show its effect not only in the health sector, but also in almost all sectors. Because it has such a widespread effect, it has been the focus of attention in research.

One of the factors affected by Covid-19 is electrical energy consumption. Various studies have been carried out on this subject. In a study conducted by Ghiani et al in April 2020 on Italy, it was determined that the Covid-19 pandemic caused a decrease of up to 37% in electrical energy consumption compared to the same time as the previous year. In the study, it was also determined that there was a decrease in carbon dioxide emissions due to the decrease in energy consumption (Ghiani et al., 2020, p. 18).

In a study carried out by Wang and Su in 2020 the short-term impact of COVID-19 on the Chinese environment from the perspective of time and space was examined. The results of the analysis show that China's energy consumption, especially total coal consumption, decreased sharply during the period under consideration, and accordingly, the COVID-19 pandemic improved China's air quality in the short term and has significantly contributed to the reduction of global carbon emissions and atmospheric nitrogen dioxide (NO<sub>2</sub>) concentrations (Wang & Su, 2020, p. 9).

In a study conducted on India in June 2020 by Aruga et al., it was investigated how the COVID-19 cases affected the energy consumption of India in the period between March and June 2020, when the first quarantine was implemented. The study found that there is a long-term relationship between COVID-19 cases and energy consumption, and that COVID-19 cases have a positive impact on Indian energy consumption. The authors attributed this result to the increase in energy consumption caused by the relaxation of quarantine practices (Aruga et al., 2020, p. 1).

In a study conducted by Carvalho et al on Brazil and its geographical regions, weekly energy consumptions were compared in the periods before and after the quarantine applications. In the study, with the increase of remote working arrangements for some of the Brazilian population, electricity consumption in residences increased; on the other hand, a significant decrease was observed in electricity consumption in the industry, trade and transportation sectors (Carvalho et al., 2021, p. 3362).

In a study by Rouleau & Gosselin, the energy consumption measured in a 40 residential social housing building in Quebec City, Canada, was compared with the months before the quarantine application. According to the results of the comparison, it was observed that the electricity and hot water consumption habits changed in the first two months of the quarantine, when the most intense quarantine measures were applied. Another result determined for this period, when both

electricity and hot water consumption increased, is that the consumption takes place during the day rather than intensifying in the evening, as was observed before the quarantine application (Rouleau & Gosselin, 2021, p. 1).

In a study conducted by Bulut on Turkey, it was stated that the precautions taken during the Covid-19 process led to a significant decrease in energy consumption in the commercial and industrial sectors, while it caused a noticeable increase in the housing sector (Bulut, 2020, p. 5).

When the studies in the literature are examined, no study has been found that empirically examines the effect of Covid-19 on electrical energy consumption in the short and long term in Turkey. In this study, the effects of the increase in the number of covid-19 cases in Turkey on electrical energy consumption and the change in energy consumption during the normalization process are discussed.

## **2. Material and Method**

In this study, it is aimed to examine the short and long term effects of the Covid-19 pandemic on electrical energy consumption in Turkey. For this purpose, the variables used in this study are the total number of Covid-19 cases per day, the dollar sales rate and electrical energy consumption. The data used in the study covers the period of 26 November 2020-15 March 2021. Although the first date of the covid-19 case in Turkey was seen on March 11, Health Minister Fahrettin Koca stated that the number of patients with mild symptoms that were not announced before 25 November 2020 will also be announced as of this date, and the number of announced cases has increased significantly as of this date. Therefore, 26 November 2020 has been taken as the starting date in order to establish the standard in the data.

The ARDL limit test approach developed by Pesaran et al. (2001) was applied in order to determine the short- and long-term relationships between the number of Covid-19 cases and energy consumption in Turkey. One of the main reasons we use the ARDL model is that it is effective even when the sample size is small and can avoid autocorrelation problems.

Among the data used in the study, the electrical energy consumption data is obtained from the Turkish Electricity Transmission Company's (TEİAŞ) load allocation information system (YTBS), the dollar sales rate is obtained from the Central Bank Electronic Data Distribution System and the total number of Covid-19 cases obtained from the Our World in Data database. The variables used in the study were included in the analysis in logarithmic form.

**Table 1. Descriptive Statistics**

Variables	Mean	Median	Maximum	Minimum	Standard Deviation	Number of Observations
<b>Energy consumption</b>	866.540,5	882.709	959.775	691.589	57.965	110
<b>Total Cases</b>	115.591,7	137.886	203.456	18	66.688,21	110
<b>Dollar exchange rate</b>	6,811909	6,825	7,23	6,28	0,183915	110

Table 1 includes descriptive statistics for the variables used in the study. While the number of cases ranged from 18 people to 203,456 people in the examined period, the average number of cases was 115,591.7. While the electrical energy consumption ranged between 691.589 MWh and 959.775 MWh, an average of 866,540.5 MWh of electrical energy was consumed. In this period, the dollar rate changed between 6.28 and 7.23 and the average dollar rate was 6.81.

In order to apply the ARDL bounds test approach, the variables used in the model must be stationary at the level or first order. In order to determine whether the variables are stationary or not, Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP) unit root tests were first applied to the variables. ADF unit root test results are given in Table 2 and PP unit root test results are given in Table 3.

**Table 2. ADF Unit Root Test Results**

	logcases	logenergy	loger
<b>Level</b>	-11,30943*	-4,503498*	-1,700848
<b>First Difference</b>	-4,310356*	-4.113527*	-6,470895*

**Note:** \* These are the test values that are significant at the 1% significance level.

**Table 3. PP Unit Root Test Results**

	logcases	logenergy	loger
<b>Level</b>	-25.22071*	-6.377010*	-2.482735
<b>First Difference</b>	-6.855872*	-21.25789*	-9.055877*

**Note:** \* These are the test values that are significant at the 1% significance level.

The unit root tests applied in the study contain constant and trend. When Tables 2 and 3 are examined, it is seen that both tests give similar results. According to the results of both tests, it is seen that the number of cases and energy consumption variables are stationary at the level, while the dollar rate variable becomes stationary when the first difference is taken. Therefore, the prerequisite of ARDL bounds test approach is to be at least first-order stationary.

Breusch-Godfrey Serial Correlation LM test was applied to the model in order to investigate whether there was an autocorrelation problem in the model, and the Breusch-Pagan-Godfrey Heteroscedasticity test was applied to investigate whether there was a variable variance problem.

**Table 4. Autocorrelation and Heteroscedasticity Test Results**

<b>BG F-stat</b>	1.740571
<b>BPG F-stat</b>	2.386524

When the test results were examined, it was seen that there was no autocorrelation problem in the model, but there was heteroscedasticity (changing variance) problem. Therefore, when measuring the standard errors of ARDL models in the presence of heteroscedasticity, heteroscedasticity and autocorrelation corrected (HAC) standard errors were used to reduce the deviations.

The ARDL model was estimated to investigate whether daily changes in the total number of COVID-19 cases in Turkey have an effect on daily energy consumption. While estimating the ARDL model, the lag length was determined according to the Schwarz criterion. The model determined according to the Schwarz criterion is the ARDL (8, 9, 0) model. The estimation results of the model are given in Table 5.

**Table 5. ARDL Estimation Results**

<b>Variables</b>	<b>Coefficient</b>	<b>t-statistic</b>
LOGENERGY(-1)	0.823853*	8.448660
LOGENERGY(-2)	-0.161513*	-2.708817
LOGENERGY(-3)	-0.071010	-1.416539
LOGENERGY(-4)	-0.092743	-1.630252
LOGENERGY(-5)	-0.095703	-1.134428

LOGENERGY(-6)	-0.072057	-1.412772
LOGENERGY(-7)	0.763971*	7.656080
LOGENERGY(-8)	-0.728802*	-5.426572
LOGCASES	0.079567	0.214816
LOGCASES(-1)	-0.390526	-0.613536
LOGCASES(-2)	1.118817***	1.941749
LOGCASES(-3)	-0.988545***	-1.758645
LOGCASES(-4)	0.312438	0.974895
LOGCASES(-5)	0.211526	0.959614
LOGCASES(-6)	0.037771	0.107278
LOGCASES(-7)	-0.779313***	-1.969558
LOGCASES(-8)	0.973401**	2.190524
LOGCASES(-9)	-0.481587**	-2.239149
LOGEXCHANGERATE	0.407309**	2.422080
C	6.766545*	4.040287

**Note:** These are the test values that are significant at the \* %1; \*\* 5%; \*\*\* 10% significance level.

When Table 5 is examined, it is seen that daily changes in the number of Covid-19 cases do not have a statistically significant effect on daily energy consumption in the short term. Looking at the lagged values of the daily total number of cases, it is seen that the daily change in the number of cases affects the daily electrical energy consumption with a delay of two days. It is observed that the changes in the dollar selling rate cause a change in the daily energy consumption in the short term in the same direction.

A boundary test was conducted to understand whether the cointegration relationships between COVID-19 cases and energy consumption were maintained throughout the entire test period.

**Table 6. Bounds Test Results for Cointegration**

k=2	F statistic	Lower limit I(0)	Upper limit I(1)	Significance levels
$\logenergy = f(\logcases, loger)$	7,195639	5,15	6,36	%1
		3,79	4,85	%5
		3,17	4,14	%10

When the bounds test was applied, it was observed that there was a long-term relationship between the variables at all levels of significance. Table 6 shows a long-term relationship between COVID-19 cases and energy consumption. In order to determine whether the long-term relationship continues with the effects of COVID-19 cases, the coefficients of the cointegration equation given in Table 7 can be examined.

**Table 7. ARDL Long-Run Coefficients**

Variables	Coefficient	t-statistic
logcases	0.147550	2.803674*
loger	0.642440	2.362955**

**Note:** \* and \*\* are test values that are significant at the 1% and 5% significance level.

When Table 7 is examined, it is seen that both the number of Covid-19 cases and the dollar exchange rate have a long-term effect on electrical energy consumption. Therefore, according to this table, both the increase in the number of Covid-19 cases and the rise in the dollar exchange rate will increase electrical energy consumption in the long run. Finally, ARDL error correction model was applied since it was understood that there was a cointegration relationship between the number of Covid-19 cases and electrical energy consumption. Table 8 shows the ARDL error correction model results.

**Table 8. ARDL Error Correction Model Results**

Variables	Coefficient	t-statistic
C	6.766545*	4.720759
D(LNENERGY(-1))	0.457856*	3.214297
D(LNENERGY(-2))	0.296343**	2.458869
D(LNENERGY(-3))	0.225333**	2.084995
D(LNENERGY(-4))	0.132590	1.356528
D(LNENERGY(-5))	0.036888	0.437851
D(LNENERGY(-6))	-0.035169	-0.464618
D(LNENERGY(-7))	0.728802*	9.789983
D(LNCASES)	0.079567	0.231794
D(LNCASES(-1))	-0.404507	-1.379810
D(LNCASES(-2))	0.714310**	2.598669

<b>D(LNCASES(-3))</b>	-0.274236	-1.348348
<b>D(LNCASES(-4))</b>	0.038203	0.289310
<b>D(LNCASES(-5))</b>	0.249728	1.283584
<b>D(LNCASES(-6))</b>	0.287499**	2.059520
<b>D(LNCASES(-7))</b>	-0.491814*	-3.450081
<b>D(LNCASES(-8))</b>	0.481587*	3.462934
<b>CointEq(-1)*</b>	-0.634003*	-4.719345

**Note:** \* and \*\* are test values that are significant at the 1% and 5% significance level.

According to the error correction model result, the error correction term was found to be negative and statistically significant. This again proves the existence of a long-term relationship between the variables.

### **3. Conclusion**

The Covid-19 case, which first appeared in China and affected the whole world in a short time, was declared a pandemic by the World Health Organization (WHO) on March 11, 2020. Thereupon, all countries started to implement various rules ranging from social distance, suspension of activities of various venues, travel restrictions and, at the last stage, full closure in order to combat the pandemic. However, these practices also created different effects in terms of economic, social and political aspects. In this study, the effects of the number of Covid-19 cases and the exchange rate on electrical energy consumption are discussed.

In the study, the ARDL model was used to determine the short and long-term relationships between electrical energy consumption, the number of covid-19 cases and the exchange rate. As a result of the analysis, it has been determined that daily changes in the number of Covid-19 cases do not have a statistically significant effect on daily energy consumption in the short term. Looking at the lagged values of the daily total number of cases, it was seen that the daily change in the number of cases affected the daily electrical energy consumption with a delay of two days. The reason for the delayed emergence of this effect may be that after the detection and disclosure of the increasing number of cases and the time until the public learns, the public pays more attention not to leave the house and this leads to more electrical energy consumption in the residences. It is observed that the changes in the dollar selling rate cause a change in the daily energy consumption in the short term in the same direction. In the long term, it has been

determined that the changes in both the number of cases and the exchange rate cause a change in the electrical energy consumption in the same direction.

Energy is a finite factor in nature and it remains unclear how long the covid-19 pandemic will last. In order to meet the increasing energy need with the effect of the pandemic, the society should be made aware of using energy in an efficient way and alternatively, the use of renewable energy sources should be preferred.

## References

- Aruga, K., Islam, M. M., & Jannat, A. (2020). Effects of COVID-19 on Indian Energy Consumption. *Sustainability*, 12(14), 5616. <https://doi.org/10.3390/su12145616>
- Bulut, M. (2020). *Effects of New Normal Life on Electricity Consumption in Covid-19 Process*. <https://doi.org/10.5281/ZENODO.3902885>
- Carvalho, M., Delgado, D. B. de M., Lima, K. M. de, Cancela, M. de C., Siqueira, C. A. dos, & Souza, D. L. B. de. (2021). Effects of the COVID-19 pandemic on the Brazilian electricity consumption patterns. *International Journal of Energy Research*, 45(2), 3358-3364. <https://doi.org/10.1002/er.5877>
- Ghiani, E., Galici, M., Mureddu, M., & Pilo, F. (2020). Impact on electricity consumption and market pricing of energy and ancillary services during pandemic of COVID-19 in Italy. *Energies*, 13(13), 3357.
- Pesaran, M. H., Shin, Y., & Smith, R. J. (2001). Bounds testing approaches to the analysis of level relationships. *Journal of applied econometrics*, 16(3), 289- 326.
- Rouleau, J., & Gosselin, L. (2021). Impacts of the COVID-19 lockdown on energy consumption in a Canadian social housing building. *Applied Energy*, 287, 116565.
- Wang, Q., & Su, M. (2020). A preliminary assessment of the impact of COVID-19 on environment – A case study of China. *The Science of the Total Environment*, 728, 138915. <https://doi.org/10.1016/j.scitotenv.2020.138915>

## INVESTIGATION OF THE GENERAL PROFILE OF FATAL AND INJURY TRAFFIC ACCIDENTS IN ERZURUM

by Yağız Can Bayhan, Sivas Cumhuriyet University, [yagiz@cumhuriyet.edu.tr](mailto:yagiz@cumhuriyet.edu.tr); Hakan Eygü, Atatürk University, [hakaneygu@atauni.edu.tr](mailto:hakaneygu@atauni.edu.tr)

**Özet:** Küreselleşmenin etkileri ekonomiden teknolojik gelişmelere kadar hemen her alanda gözlenmektedir. Hızla artan nüfus ve teknolojik gelişmelerle birlikte yalnızca motorlu taşıt sayısı ve sürücü sayısı artmamış, aynı zamanda trafik kazaları da bütün dünyada ciddi oranda artmıştır. Özellikle gelişmemiş ve gelişmekte olan ülkelerin temel problemi olan trafik kazaları sonucunda yalnızca büyük can ve işgücü kayıpları değil, aynı zamanda ciddi hastane harcamaları ve maddi kayıplar da yaşanmaktadır. Meydana gelen trafik kazalarının çoğunun engellenebilir olduğu göz önüne alındığında, başta gelişmemiş ve gelişmekte olan ülkeler olmak üzere tüm dünyada trafik kazalarının incelenerek önlem alınması önem arz etmektedir.

Gelişmekte olan ülkeler arasında yer alan ve gelişmiş ülkelere kıyasla hala ciddi trafik kayıpları veren Türkiye’de de trafik kazalarını etkileyen faktörler üzerine yoğun çalışmalar yapılmakta ve bu çalışmalar doğrultusunda yerel otoriteler tarafından kazaların azaltılmasına yönelik çeşitli tedbirler alınmaktadır. Türkiye’de yer alan Erzurum ilinde 2019 yılında meydana gelen ölümlü/yaralanmalı trafik kazaları incelendiğinde; ilgili yılda meydana gelen 1079 trafik kazasının yaklaşık %50’sinin tek araçlı, yaklaşık %43’ünün iki araçlı ve yaklaşık %7’sinin çok araçlı trafik kazaları olduğu görülmektedir. Tek araçlı kaza sayısının (kazaya yalnızca tek araç karışmıştır) bu kadar fazla olması, dikkatleri özellikle bu yöne çekmekte ve bu kazaların genel profilinin incelenmesinin gerekliliğini doğurmaktadır.

Bu çalışmanın amacı; Erzurum ilinde 2019 yılında meydana gelen ölümlü/yaralanmalı trafik kazalarının genel profilini incelemek ve betimleyici istatistikler yardımıyla tek araçlı kazalar hakkında kapsayıcı bilgiler sunmaktır. Bu amaç doğrultusunda Emniyet Genel Müdürlüğü tarafından kayıt altına alınan kaza tespit tutanakları ele alınmış ve 540 ölümlü/yaralanmalı trafik kazası incelenmiştir. Elde edilen bulgulara göre; gündüz ve özellikle 12:00-17:59 saatleri arasında ölümlü/yaralanmalı kazaların ciddi oranda arttığı ve kazaların yarısından fazlasının aşırı hızdan kaynaklandığı tespit edilmiştir. Bununla birlikte sürücülerin eğitim düzeyleri, yaş grupları ve cinsiyetlerine göre ölümlü/yaralanmalı kaza oranlarının ciddi oranda değiştiği ve yayaya çarpma vakalarının Erzurum’da çok fazla yaşandığı tespit edilmiştir.

**Anahtar kelimeler:** Küreselleşme, Trafik kazaları, Erzurum, Betimleyici istatistikler.

**Abstract:** The effects of globalization are observed in almost every field from economy to technological developments. With the rapidly increasing population and technological developments, not only the number of motor vehicles and the number of drivers has increased, but also traffic accidents have increased significantly all over the world. As a result of traffic accidents, which are the main problems of especially underdeveloped and developing countries, not only great loss of life and labor, but also serious hospital expenses and financial losses are experienced. Considering that most of the traffic accidents that occur are preventable, it is important to take precautions by examining traffic accidents all over the world, especially in underdeveloped and developing countries.

Intensive studies are carried out on the factors affecting traffic accidents in Turkey, which is among the developing countries and still has serious traffic losses compared to developed countries, and various measures are taken by local authorities to reduce accidents in line with these studies. When the fatal/injury traffic accidents that occurred in Erzurum in Turkey in 2019 are examined; It is seen that approximately 50% of 1079 traffic accidents occurred in the relevant year are single-vehicle, approximately 43% two-vehicle and approximately 7% multi-vehicle traffic accidents. The fact that the number of single-vehicle accidents is so high (only one vehicle was involved in the accident) draws attention in this direction and necessitates examining the general profile of these accidents.

The aim of this study; to examine the general profile of fatal/injury traffic accidents that occurred in the province of Erzurum in 2019 and to provide comprehensive information about single-vehicle accidents with the help of descriptive statistics. For this purpose, accident detection reports recorded by the General Directorate of Security were handled and 540 fatal/injured traffic accidents were examined. According to the findings obtained; It has been determined that during the daytime and especially between 12:00 p.m and 5:59 p.m, fatal/injury accidents increase significantly and more than half of the accidents are caused by overspeed. However, it has been determined that the fatal/injury accident rates vary significantly according to the education levels, age groups and genders of the drivers, and the pedestrian accidents are very common in Erzurum.

**Keywords:** Globalization, Traffic accidents, Erzurum, Descriptive statistics.

## Introduction

The effects of globalization are observed in almost every field from economy to technological developments. With the rapidly increasing population and technological developments, not only the number of motor vehicles and the number of drivers has increased, but also traffic accidents have increased significantly all over the world. As a result of traffic accidents, which are the main problems of especially underdeveloped and developing countries, not only great loss of life and labor, but also serious hospital expenses and financial losses are experienced. Considering that most of the traffic accidents that occur are preventable, it is important to take precautions by examining traffic accidents all over the world, especially in underdeveloped and developing countries.

According to the report of the World Health Organization, while 1.35 million people die annually due to traffic deaths, more than 50 million people are injured at a level that affects their quality of life (World Health Organization, 2018). At the same time, according to the calculations, it has been determined that the global losses due to traffic accidents are 518 billion USD and that these losses reduce the national income of especially developed and developing countries (World Bank, 2018). In Turkey, which is among the developed countries, intensive studies are carried out to reduce traffic accidents and strict measures are implemented by the relevant authorities. In fact, with the strict measures taken, it is aimed to reduce traffic deaths by half in the next 10 years (Ministry of Development, 2018). For this reason, studies on reducing fatal/injury traffic accidents in Turkey are important.

In 2019, 1079 fatal/injured traffic accidents occurred in Erzurum. In these accidents, 2070 people were injured and 21 people died. When these accidents are analyzed according to the number of vehicles; It is noteworthy that 540 of these accidents are single-vehicle accidents. However, 988 people were injured and 16 people died in single-vehicle accidents. The high traffic losses in single-vehicle accidents attract attention in this direction. The aim of this study; To examine the general profile of fatal/injury traffic accidents that occurred in Erzurum, Turkey in 2019 and to provide comprehensive information about single-vehicle accidents with the help of descriptive statistics. For this purpose, accident detection reports recorded by the General Directorate of Security were handled and 540 fatal/injured traffic accidents were examined.

## Literature Review

Traffic accidents are a real problem not only in Turkey but all over the world. According to the World Health Organization, most of the traffic accidents are caused by human error, but it draws attention with its preventable aspect most of the time (World Health Organization, 2018). For this reason, many studies are carried out to reduce traffic accidents to minimum levels.

In the study conducted by Lee, Chung and Son (2008), it was stated that road condition, vehicle factors and environmental factors significantly affect fatal/injury traffic accidents. In the study conducted by Soehodho (2017), it was pointed out that the severity of traffic accidents would increase depending on the vehicle and driver characteristics, road and environmental characteristics, and it was mentioned that the human factor constitutes the largest share in traffic accidents. Čubranic et al. (2017) examined the factors that could cause an accident in their study. According to the results obtained, a significant relationship was found between the other factors causing traffic accidents and the human factor. Hosseinpour, Yahaya, and Sadullah (2014) suggested that the most of severe injuries were caused by road condition and environmental factors. Delice (2015) examined the factors affecting traffic accidents with multiple regression analysis. According to the results obtained from the study, it has been determined that driver characteristics such as gender, age, marital status, education level affect traffic accidents. Balcı, Gölcük, and Kahramanlı (2017) investigated the factors affecting fatal and injury accidents in their study. According to the findings, it was determined that the most effective factor on the number of dead was vehicle defect, and the human factors, education factor and road condition factors on the number of injured. Oralhan and Göktolga (2017) examined the factors affecting the fatal and injury traffic accidents in the province of Kayseri. As a result of the analysis, it has been determined that the variables of the driver's education status, weather condition, accident time, road surface, road direction, geometric shape of the road, day status and accident type have a significant effect. Eygü (2018) used the data of traffic accidents with fatal, injury and material damaged that occurred in Ankara between 2010-2015. It has been determined that the location of the accident, the type of accident, weather conditions, road and environmental characteristics and the driver factor affect the result of the accident. In the study conducted by Eygü and Bayhan (2020), the factors affecting the fatal and injury traffic accidents in Erzurum between the years 2012-2015 were examined with decision tree algorithms. According to the findings; It has been determined that accidents that occur as a

result of run-off the road, collision with an obstacle and collision with a pedestrian affect fatal/injury accidents.

## Results

In the 540 single-vehicle traffic accidents that occurred in Erzurum in 2019, 988 people were injured and 16 people died. While 58.51% of these accidents, in which 95.18% of the drivers were male, took place inside the settlement, 41.48% occurred outside the settlement. On the other hand, 73% of the related accidents occurred during the daytime, 25% at night and 2% at twilight. Information about the accidents is presented below.

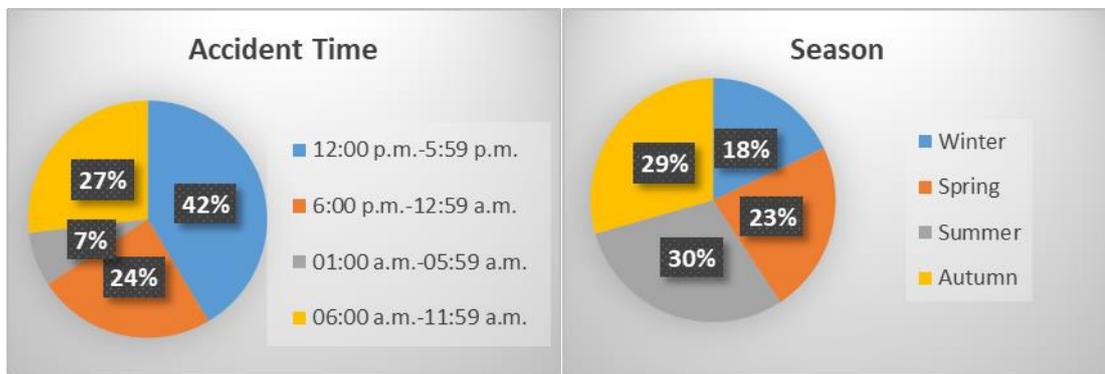
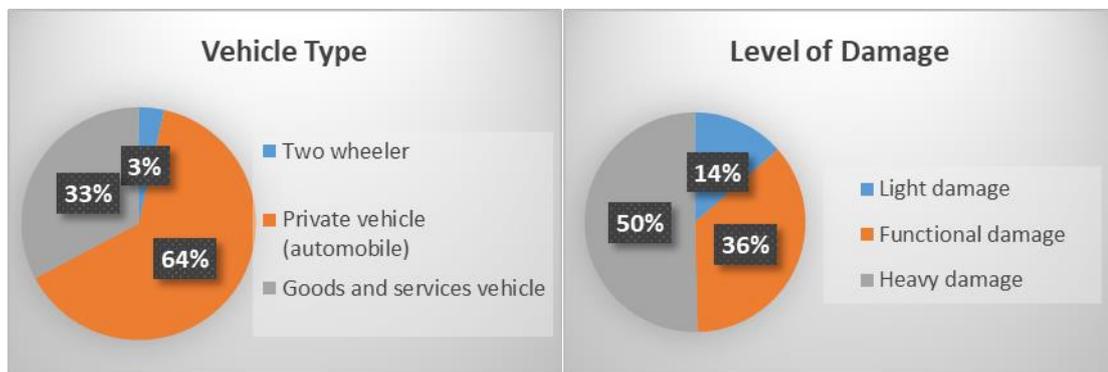


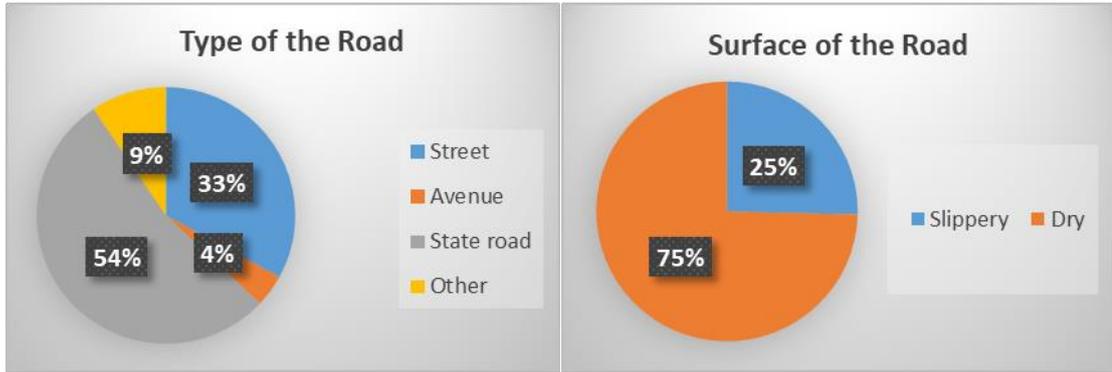
Figure 1. Accident Time and Season

In figure 1, the accident hour groups and the seasons in which the accident occurred are shown. It is observed that fatal/injury traffic accidents in Erzurum increase significantly between 12:00 p.m and 5:59 p.m. On the other hand, in Erzurum, which is located in the Eastern Anatolia Region and has harsh winter seasons, it has been observed that the fatal/injury accidents have decreased to a large extent in the winter months. This situation shows that drivers are accustomed to winter conditions and are more careful in winter.



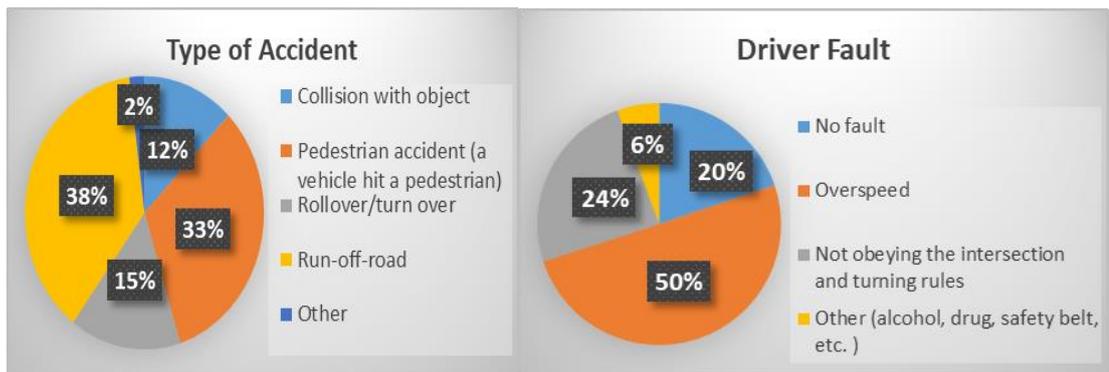
Şekil 2. Vehicle Type and Level of Damage

In figure 2, the vehicles involved in the relevant traffic accidents are classified according to their types and damage levels of vehicle. As it is seen fatal/injury traffic accidents in the highest share of private vehicles, while the lowest share is two-wheeled vehicles. It is noteworthy that the number of fatal/injury accidents in two-wheeled vehicles is lower than in other provinces of Turkey. On the other hand, it was observed that the vehicles involved in the accident were heavily damaged at a high rate. This is of course comply with expectations.



Şekil 3. Type and Surface of the Road

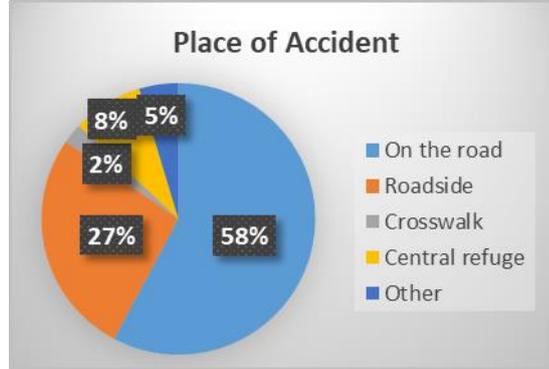
Information about the type and surface of the road is shown in figure 3. As can be seen, approximately 87% of fatal/injury traffic accidents occurred on streets and state roads, however, a small proportion of related accidents occurred on streets and other road types (village road, forest road, park area, etc.). While 75% of the roads where these traffic accidents took place had dry ground, the remaining 25% took place on slippery (snowy, icy, etc.) ground.



Şekil 4. Type of Accident and Driver Fault

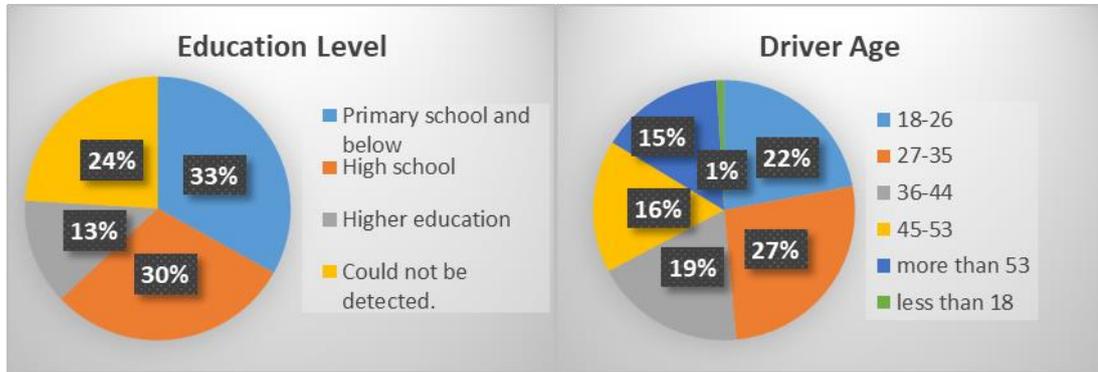
Types of accidents and driver faults according to their groups are shown in figure 4. It has been determined that 38% of the fatal/injured traffic accidents occurred as a result run-off the road and 33% as a result of collision with pedestrian. The fact that there are so many

fatal/injury accidents as a result of hitting a pedestrian draws attention especially in this direction. On the other hand, when the driver's faults are examined, it is seen that the accidents that occur as a result of overspeed have a high rate.



Şekil 5. Place of Accident

The places where the accident occurred according to the location of the road are shown in figure 5. It is seen that most of the related accidents occur on the road and on the roadside. Considering that only one vehicle is involved in these accidents, it can be said that the related accidents are mostly the result of the driver's carelessness.



Şekil 6. Education Level and Age of Driver

The distribution of the drivers involved in the accident according to their education level and age groups is shown in Figure 6. Although about 24% of the education level of the drivers cannot be determined, it is seen that the share of drivers with primary school or lower education level in fatal/injury traffic accidents is high and as the education level of the drivers increases, the number of fatal/injured traffic accidents decreases. On the other hand, when the age groups of the drivers are examined; It has been determined that the 18-26 and 27-35 age groups

constitute the largest share. This situation shows that drivers between the ages of 18-35 should be more careful.

### **Conclusions**

In this study, the general profile of fatal and injury traffic accidents that occurred in Erzurum in 2019, involving only one vehicle, was examined. According to the findings, it can be said that drivers should be careful especially between 12:00 p.m and 5:59 p.m. In addition, it is noteworthy that traffic accidents caused by overspeed and hitting a pedestrian are very high. It can be said that drivers should obey all the rules, especially speed limits, turn and intersection rules and be much more careful on the roads where pedestrians are dense. On the other hand, it has been determined that the 18-26 and 27-35 age groups are much more involved in traffic accidents than other age groups, and the number of accidents decreases when the education level of the drivers increases. In the light of this informations, it can be recommended to focus on the relevant age groups and drivers with primary school graduates and below, and to raise awareness about traffic rules for these drivers.

## References

- Balcı, M., Gölcük, A., & Kahramanlı, H. (2017). İstatistiksel yaklaşımla trafik kazalarındaki ölüm ve yaralanma durumlarının kusurlu unsurlarla ilişkilerinin incelenmesi. *Selçuk Teknik Dergisi*, 16(3), 210-225.
- Čubranić, D., Lipovac, M., Čičević, K., & Antić, B. (2017). A Model for Traffic Accidents Prediction Based on Driver Personality Traits Assessment. *Promet-Traffic&Transportation*, 29(6), 631-642.
- Delice, M. (2015). Trafik kazalarına etki eden sürücüyle ilgili faktörlerin çoklu regresyon analiziyle incelenmesi. *Uhab journal*, 4(11).
- Eygü, H., & Bayhan, Y. (2020). *Karar Ağaçları ile Sınıflandırma: CHAID Algoritması Teori ve Bir Uygulama*. Ankara: Ekin Basım Yayın Dağıtım.
- Eygü, H., (2018). Trafik Kazalarını Etkileyen Faktörlerin Yapısal Eşitlik Modeli ile İncelenmesi. *Elektronik Sosyal Bilimler Dergisi*(66), 837-850
- Hosseinpour, M., Yahaya, A., & Sadullah, A. (2014). Exploring the effects of roadway characteristics on the frequency and severity of head-on crashes: Case studies from Malaysian Federal Roads. *Accident Analysis & Prevention*(62), 209-222.
- Lee, J., Chung, J., & Son, B. (2008). Analysis of traffic accident size for Korean highway using structural equation models. *Accident Analysis & Prevention*, 40(6), 1955-1963.
- Oralhan, B., & Göktolga, Z. (2017). Risk Faktörlerinin Trafik Kazaları Üzerindeki Etkisi: Kayseri Örneği. *İktisadi ve İdari Bilimler Fakültesi*, 325.
- Soehodho, S. (2017). Public transportation development and traffic accident prevention in Indonesia. *Journal of International Association of Traffic and Safety Sciences*, 40(2), 76-80.
- T.C. Kalkınma Bakanlığı, Karayolu Trafik Güvenliği Çalışma Grubu Raporu (2018), Available at:<https://www.sbb.gov.tr/wp-content/uploads/2020/04/KarayoluTrafikGuvencigiCalismaGrubuRaporu.pdf>

World Bank, Global Road Safety Facility Annual Report (2018), Available at:  
<https://documents1.worldbank.org/curated/en/405741548186517352/Global-Road-Safety-Facility-GRSF-Annual-Report-2018.pdf>

World Health Organization, Global Status Report on Road Safety (2018), Available at:  
<https://www.who.int/publications/i/item/9789241565684>

## A CONTENT ANALYSIS ON ASSESSMENT OF POINTS OF VIEW OF HEALTHCARE MANAGEMENT STUDENTS RELATED TO ACCOUNTING COURSES

by Namık Kemal Erdemir, Karamanoğlu Mehmetbey University, [nkerdemir@kmu.edu.tr](mailto:nkerdemir@kmu.edu.tr);  
Gülşah Kazak,

**Abstract:** Content analysis of the studies carried out on points of view of healthcare management students on accounting courses was performed in this study. All articles reached through Google academic were examined in terms of subject, conclusion and suggestions. 18 studies conducted on healthcare management students concerning accounting courses were found. These studies were grouped as per themes, their conclusions were evaluated and the suggestions in these studies were included in the study. “Healthcare management” “student” and “accounting course” key words were used in Google Academic database while searching. All articles found in line with these keywords in this database were scanned and examined and a content analysis was conducted by including all the articles obtained assessing the points of view of students in healthcare management department on accounting course. Six themes were attained by assorting the research examined by themes and conclusions of the subjects processed in each theme was evaluated and presented together.

It is observed that the mostly studied subjects were points of view of the students studying in healthcare management departments on accounting courses and the status of accounting courses in the curriculum of healthcare management-based departments of universities when the studies assorted by themes were analysed. While it is seen that the expectation of the sector from accounting training that students receive is that accounting subjects related to healthcare sector shall be provided to students, healthcare management students’ financial literacy levels differ according to samples studied. It is also observed in the studies evaluating points of view of students on distance learning that change their educational life particularly in pandemic period that although there are advantages of distance learning, students consider that it will be beneficial for them to take lessons in which they can ask in person through mutual communication. The belief of students on the fact that the courses received in class environment with personal contact with the instructor are more beneficial than the studies conducted with power point presentation. Besides this, students stated that the instructors shall be master in the field and more qualified. It is presented that students approach

accounting courses with deep concern generally, they do not like the course, their points of view change as per their levels of success and they do not want this course to be compulsory.

**Keywords:** Health management, Accounting, Accounting course, Distance education.

## INTRODUCTON

Considered as one of the sectors most difficult to be managed in developed countries, healthcare management requires professional managers (Çil Koçyiğit, Doğan , & Taş, 2016 ). The fact that this field contains human health results in usage of several disciplines together (Çimen, 2010:137). The most important decision that managers in the field of healthcare management is financial decisions among the other riskiest decisions (Ayanoglu et.al, 2013:4). Besides this, the role of accounting in the achievement of the businesses in healthcare management sector is quite significant (Coşkun, 2006:105).

The simplest definition of accounting can be expressed as “information systems with the purpose of producing information about resources used by both profit-making organizations as well as non-profit organizations, how they use these resources, changes in these resources, increases and decreases of them, and management of the organization and information that can show financial status of the organization for internal and external stakeholders, and with the purpose of recording, classifying, summarizing and reporting these information.” (Kazak and Erdemir, 2020: 4). Furthermore, accounting information system and applications are encountered as a process obliged to be used by each business. (Büyükmirza, 2009: 26).

Accounting provides the biggest support for the decision-making processes of managers in healthcare businesses (Coşkun, 2006:105). Relationship between service rendered and cost particularly draws the attention in this field. Continuously increasing costs in healthcare businesses (Kısakürek, 2010: 229, Keleş, 2021: 2, Ayanoglu, et.al., 2013: 3) also increases the necessity of cost control of these businesses. The most significant issue at this point is that the charges of the services rendered in healthcare businesses active in our country is under the control of the state. This case makes it difficult to charge the services provided and results in managers’ keeping the costs under control continuously because of this case as well. The most troublesome part of this usage of various materials in these businesses (Kısakürek, 2010:229). Therefore, it is quite crucial that managers in healthcare businesses shall be professionals in

cost control and use of the information obtained from accounting while making financial decisions and future-oriented planning.

This case requires that the individuals having administrative positions in healthcare businesses shall be able to understand financial information and interpreting financial reports in making financial decisions and cost control. This can only be performed by people possessing accounting and financing knowledge. In this respect, providing education on accounting in university programs for undergraduate postgraduate students in adequate levels is quite substantial for the people with this position and health institutions (Ayanoğlu et.al., 2013:4).

“Education on accounting is a vocational training. Vocational training can be expressed as training on improving individual in several directions by providing skills, knowledge and attitude required by a specific occupation” (Ertuğrul and Özdemir, 2014:216). Students receiving accounting training can gain knowledge, skills and attitude required for the occupation (Çil Koçyiğit et.al, 2016:540, Ertuğrul and Özdemir, 2014:216).

The purpose of this study shed light on the researchers to carry out a new study within the light of these information by making content analysis of the studies in which healthcare management students’ approaches and points of view regarding accounting courses are evaluated.

## **METHOD**

Qualitative research methodology was used in the study and articles related to students of healthcare management department and accounting courses were analysed.

The sample of the study is consisted of the articles on healthcare management students and their perceptions on accounting courses. “Google Academic Database” was used in the search of the articles. 18 article themes related to the issue were found by using “healthcare management” “student” and “accounting course” keywords in Google Academic Database as of May 2021 and 6 theses set forth. Themes were enumerated and the number of the studies on the themes and the conclusions processed in these themes were given under determined themes. Suggestions were presented by generalizing as given in 18 studies. 6 articles were found in relation with Theme 1, 5 with Theme 2, 1 with Theme 3 and 1 with Theme 4, 3 with Theme 5, and 2 with Theme 6.

**Table 1.** Themes processed in academic works.

Theme 1	Determination of the features such as perceptions, attitude, behaviours and success of students in healthcare management departments taking accounting courses	6
Theme 2	Analysis of curriculum and national competency of the accounting courses provided in universities in healthcare management postgraduate and undergraduate programs	5
Theme 3	The expectation of health sector from accounting training and education that healthcare management students received to possess vocational information and skills	1
Theme 4	Evaluation of the expectations of undergraduate students receiving education in department of healthcare management about the specifications of accounting instructors and determination of the expectations concerning the teaching methods used by instructors by expressing the importance of the courses with accounting content in this field	1
Theme 5	Determination of Financial Literacy Information Level of undergraduate and postgraduate students receiving education on healthcare management	3
Theme 6	Points of view of students taking accounting course through distance learning on distance learning, self-sufficiency of them related to distance learning system and opinions of accounting courses performed via distance learning	2

## FINDINGS

### Assessment of Conclusions of Research Themes

**Theme 1:** Assessment of the conclusions of studies related to the themes determining features as perception, attitude, behaviour and success on accounting courses and the concept of accounting of healthcare management students receiving accounting training

- In the study conducted by Biçer et.al. (2018), it was found out that students' being unwilling against accounting and finding the course boring, and finding the course necessary is more than %3 and rate of students' being willing about the course and liking the course is found as 2,20. In conclusion, it is observed that students receiving healthcare management do not like accounting course, their interest in the course is low and they are not aware of the necessity of the course in full measure, and only students with good grades find the course necessary. Moreover, another conclusion is that the students who like the department they receive education find the course essential. The success status of the students influences their viewpoint about the course.
- According to the conclusion of the study performed by Çil Koçyiğit, Doğan and Taş (2016), students stated that expertise of the instructors of the course and their having high knowledge level and students' liking or disliking the course affect the success of the students positively. Besides this, presentation of the course via power point, students' having more than one exam at the same day and perceiving the course as boring affect the success in negative way.
- In the studies of Akpınar and Yıldız (2018) and Fidan and Ağırbaş (2019), it was concluded that “students' perceptions on the concept of accounting are “accounting as a difficult, boring and complex course”, “accounting as a necessary, beneficial and important course” and “accounting as an exciting course” and “accounting as a course requiring attention and hard work””.
- The conclusion of the study of Biçer and İlman (2018) also supports the conclusion of the study conducted by Çil Koçyiğit, Doğan and Taş (2016). While instructors' having

good knowledge of the field and their experience influence the positive attitude of the students about the course, presenting the course via power point affects their success level. Students also consider that accounting course will contribute to their working life in the future and influence their professional career positively.

- It was specified in the study conducted by Çil Koçyiğit and Ekinci (2020) that students worry about accounting course especially in the first-grade students, they know that this course will positively reflect to the job opportunities in the future but they are not willing to learn the subjects of accounting and even they want the removal of it from the curriculum. students stated that will do not choose this course if it is not compulsory and compared to other courses, they are more anxious and nervous about accounting course and accounting examination.

**Theme 2:** Analysis of curriculum and national competency of accounting courses given in undergraduate and postgraduate healthcare management departments of universities

- Çil Koçyiğit, Şenay, Dursun, and Kahraman (2018) specified that majority of healthcare management postgraduate programs contain accounting and finance courses and some curriculums only approximately at the rate of 20% do not include accounting and finance courses. Besides this, it was revealed as a result of the examinations that the average rate of accounting and finance courses in total credit is between 16,5% and 20% in the curriculums analysed and accounting and finance courses are generally elective.
- Tugay Arslan et.al. (2020) analysed acquisition contribution level of each course given in healthcare management departments and qualifications of program related to that course in their study. Afterwards, total contribution level point of national competency aspects (knowledge, skill, competence) and contribution average value of each course were calculated. It was also expressed that the level of assessment of accounting course in terms of competency is quite low.
- Savaş and Ekergil (2019) indicated that accounting courses are not paid sufficient importance in the curriculums in the departments. As well as this, “Financial (Fiscal) Statements Analysis” and “Management Accounting” courses, being an important tool of accounting, were determined as not being paid adequate significance. It was specified that “accounting” and “finance” courses included in curriculum of healthcare

management shall be extended within this scope and including specialized accounting fields (medical accounting, environmental accounting etc.) to these departments shall be beneficial for meeting the increasing demand in health sector.

- Ayanoğlu, Abuhanoğlu and Teke (2013) marked in their study that accounting and finance courses are given in different grades with different names during undergraduate study and they have 9,5% share on average within all courses of the departments. Furthermore, it was specified that Financial Management I-II, General Accounting I-II, and Cost Accounting courses are compulsory and other optional courses are elective and when credits of courses are evaluated on average, the credits of these courses are low in universities in general and.
- Şahin (2020) expressed as a result of the study conducted that there are some courses having different names although the syllabuses have the same contents. Together with this, it can be observed that General Accounting course is included in curriculum of undergraduate and associate degrees of healthcare management in almost all universities and is compulsory, and even though course of course Financial Management in Health Institutions is elective in some associate degree programs, it is compulsory in undergraduate programs. It was concluded that cost accounting and financial management courses are generally given in postgraduate programs as elective or compulsory courses.

**Theme 3:** Expectations of health sector from accounting education and training that healthcare management students receive to gain vocational knowledge and skills

- Çil Koçyiğit, Şenel, and Bostancı (2016) expressed that healthcare businesses' expectations about accounting training are as follows: accounting training and education shall cover practical knowledge, Uniform Accounting Plan shall be improved in a manner that it will cover the necessities of health sector, internship opportunities shall be provided in health sector to the students receiving accounting training, the content of the accounting courses taught in schools shall be determined in cooperation with health sector and the expectations of health sector shall be paid attention etc. Sorting of accounting courses as per significance levels are:

Financial Accounting and Legislation course is of the primary significance level,

Computerized Accounting is of the second-degree significance level,

Cost Accounting is of third-degree significance level,

Management Accounting is of fourth-degree significance level.

**Theme 4:** Assessment of the expectations of undergraduate students on specifications of accounting instructors by expressing the importance of courses including accounting context in the field of healthcare management and determination of the expectations of them about the methods that instructors use

Majority of the students stated that they consider accounting course necessary in the field of healthcare management, accounting courses they receive during their educational life will affect their career positively, however they do not want to work in a field related to accounting in health sector, they do not want to do master degree in accounting after their undergraduate education, they understand accounting courses better on black-white board and they study for accounting courses only during exam weeks with the purpose of passing the class. The most important features in relation with the capabilities of instructors are their liking teaching, teaching capability and being asked questions without any hesitation. The most significant features related to teaching method are solving questions-examples related to the subject following theoretical course and presentation of theory and daily life problems together.

**Theme 5:** Determination of Financial Literacy Knowledge Levels of Students receiving undergraduate-postgraduate healthcare management education

- Aktaş and Çetin (2020) indicated that financial literacy of postgraduate healthcare management students is in good level. They specified the fact that good level of financial literacy is a positive development for the sector in terms of present day and future of management of health institutions.
- Doğanay Payziner (2017) examined attitudes and behaviours of healthcare management students concerning financial literacy in four dimensions in total as “perception, interest, expenditure and attitude”. The study concluded that “there is statistically meaningful difference in interest dimension as to gender, in perception and interest dimension as to class, in interest and attitude dimension as to age, in attitude dimension as to education level of mother and in expenditure dimension as to education level of father” and when

point averages of students are analysed, it was found out that “point averages of perception, interest and expenditure dimensions of the students receiving finance course is higher than the students in other class”.

- Özer (2019) detected that the perception of healthcare management students on financial literacy is in midlevel on the basis of sub-dimensions. Besides this, it was determined that there is statistically meaningful difference in interest, attitude and expenditure dimensions of students according to gender and statistically meaningful difference in interest, perception and expenditure dimensions as per residential area.

**Theme 6:** Determination of points of view of students receiving accounting course through distance learning on distance learning system, their self-sufficiency regarding distance learning and opinions on accounting courses performed via distance learning

- Serçemeli and Kurnaz (2020) pointed out that healthcare management students do not adopt distance learning system much but they do not experience any difficulty in usage of the system in terms of their self-sufficiency. Furthermore, watching video records again and again, flexible educational opportunities and saving time are found positive in association with accounting’s being taught through distance learning while not reaching to internet and instructor and feeling isolated in social respect etc. issues are found negative aspects and thus students desire to receive accounting courses through traditional methods. The reason for that is they need an instructor to whom they can ask when they do not understand the subject and they can have peer to peer communication, and the ones who want to receive the courses without coming to school approach positively to distance learning with flexible time and place opportunities.
- In the study of Akgün (2020), it was specified that majority of female students think that distance accounting courses provide them cost advantage and significant benefits while male students contribute to a standard education program. Furthermore, male and female students consider that distance accounting training will not contribute to their future compared to formal learning.

## Suggestions

According to the suggestions in the studies examined, the followings are among the common suggestions;

- Instructors are significant in terms of their endearing accounting course to students and increasing the interest of students in the course and it is required that the studies on capabilities and efficiency of instructors shall be increased,
- Activities shall be performed to create positive attitude of students on accounting course in the following terms of undergraduate education and studies shall be conducted to provide students' active participation to the courses and to increase the motivation of the students,
- Use of “drama activities and digital platforms (Google Classroom, Kahoot, EdPuzzle etc.)” in the presentation of subjects of accounting courses,
- It is necessary that credits and the number of accounting and finance courses shall be increased in healthcare management associate's degree, bachelor's degree and master's degrees and specialized accounting courses shall be included and curriculum shall be prepared in a manner that the courses of two terms shall follow one another,
- The names of the courses with similar content shall have standard names,
- Standardization of whether healthcare management departments shall be in “Faculties?” or in “Associate Degree Programs?” and if it will be given in faculties, then it shall be determined whether in Faculty of Health Sciences or in Faculty of Economics and Administrative Sciences,
- Flipped educational system shall be provided in accounting training in a manner that it will cover both traditional educational methods and distance learning methods,
- Studies covering the students of all healthcare management departments in Turkey shall be conducted and perceptions and attitudes of healthcare management students on each level concerning accounting course shall be determined.

## CONCLUSION

When the studies in the literature in Google Academic are analysed over title of the publication and abstracts about students receiving accounting courses in healthcare management programs, 22 articles on the subject were examined among the studies found as a result of the search by “healthcare management” “accounting” and “accounting course” between May-July 2021 and 18 of these found related with the subject determined for the study and analysed. When the studies sorted in themes are analysed, it is observed that the subjects most frequently studied are on viewpoints of students in healthcare management departments about accounting courses and status of accounting courses in the curriculum of health management-based departments of universities. While the expectation of the sector from the accounting training that students receive is that specialized accounting subjects related to health sector shall be given to students, the level of financial literacy of healthcare management students differs according to sample performed. In the studies evaluating points of view of students about distance learning process that change educational life of students particularly in pandemic period, it is indicated that it will be beneficial to teach lessons in mutual communication in which they can ask anything they want besides the fact that distance learning has its own advantages. Students stated that the courses taught by communicating one-to one with the instructor on black-white board are more beneficial than the studies presented with power point. In addition to this, students specified that the instructor of the course shall have a good knowledge of the subject and be more well-informed. It turned out that students generally approach to accounting courses with concern, they do not like the course, their viewpoints about the course change as per their success level and they do not want the course to be compulsory.

According to “Directive on Job and Duty Description of Healthcare Professionals and Other Occupational Groups Working in Health Services” with (2014 date and 29007 number), health managers in the sector have duties and responsibilities related to accounting and finance. These duties and responsibilities are conducting budget, financial and cost analysis activities, planning and performing the activities in rendering services and assessment of the results of these, performance of the services that the institution render apart from medical processes and auditing the procedures of the institution. The importance of the accounting and finance courses provided to the students in higher education institution can be observed as a result of this mission undertaken by health managers in the sector. Therefore, these studies conducted in

academic field are also important. The suggestions and the cases set forth in the studies also reveal the significance of the issue. It is indicated that instructors shall change their teaching methods against the negative attitudes of the students on accounting courses and course activities and motivations of the students shall be increased. Some suggestions are as follows: accounting courses shall be compulsory for the sector, the credits of the courses shall be increased, the names of the courses shall be standardized and flipped education covering both distance education which entered into our life with pandemic period and traditional training methods shall be used together.

There are state and foundation universities and TRNC universities covering 69 healthcare management programs. 50 of these are under the roof of Faculty of Health Sciences, 18 of these under Faculty of Economics and Administrative Sciences and 1 under Faculty of Business Administration. This case causes differences between students in terms of the courses they receive and the curriculums. As specified in the suggestions, this case causing dualism shall be eliminated and the courses shall be standardized.

It is observed as a result of the study conducted that the studies in this field are generally conducted in the province of Ankara. These studies shall be increased to ensure academic studies' reaching to more general on these themes with this leading study. It was aimed with the study to evaluate student profile with an academic viewpoint and to lead further studies.

## REFERENCES

- Akgün, A. İ. (2020). Covid-19 Sürecinde Acil Durum Uzaktan Eğitimi Yoluyla Verilen Muhasebe Eğitimine Yönelik Öğrenci Görüşleri. *Anadolu Üniversitesi Açıköğretim Uygulamaları Ve Araştırmaları Dergisi*, 6(4), 208-236.
- Akpınar, S., & Yıldız , Ş. (2018). Muhasebe Eğitimi Alan Öğrencilerin Muhasebe Algılarına Yönelik Metaforlar. *Muhasebe Ve Finansman Dergisi*, 91-114.
- Aktaş, U., & Çetin , A. (2020). Sağlık Yönetimi Alanında Lisansüstü Eğitim Alan Öğrencilerin Finansal Okuryazarlık Bilgisi Düzeylerini Belirlemeye Yönelik Bir Araştırma. *İstanbul Sosyal Bilimler Dergisi*(28), 1-18.
- Ayanoğlu, Y., Abuhanoğlu, H., & Teke, A. (2013). Sağlık Hizmetleri Yönetimi Eğitiminde Muhasebeve Finansman Derslerinin Önemi. *Gazi Üniversitesi İktisadi Ve İdari Bilimler Fakültesi Dergisi*, 15(1), 1-19.
- Biçer, E., & İlman, E. (2018). Sağlık Yönetimi Bölümü Öğrencilerinin Muhasebe Derslerindeki Başarılarını Etkileyen Faktörler Hakkında Görüşleri (Sivas Cumhuriyet Üniversitesi Örneği). *Muhasebe Bilim Dünyası Dergisi*, 20(4), 995-1020.
- Biçer, E., Aydın, Y., & İlman, E. (2018). Sağlık Yönetimi Öğrencilerinin Muhasebe Dersine Karşı Tutumlarının Başarı Düzeylerine Etkisi Üzerine Bir Araştırma. *Sosyal Bilimler Araştırmaları Dergisi*, 13(1), 179-199.
- Büyükmirza, K. (2009). *Maliyet Ve Yönetim Muhasebesi, Tekdüzene Uygun Bir Sistem Yaklaşımı*, 14. Baskı, Ankara: Gazi Kitabevi.
- Coşkun, A. (2006), STK'ların Stratejik Performans Yönetiminde Yeni Bir Yaklaşım, *Sivil Toplum Dergisi*, 4(1), 105-106.
- Çil Koçyiğit , S., Şenay, F., Dursun, T., & Kahraman, G. (2018). Türkiye'deki Üniversitelerde Sağlık Yönetimi Yüksek Lisans Eğitiminde Muhasebe Ve Finansman Dersleri Üzerine Bir Araştırma. *Marmara Üniversitesi Öneri Dergisi*, 13(49), 149-166.

- Çil Koçyiğit, S., & Ekinci, N. (2020). Sağlık Yönetimi Bölümü Öğrencilerinin Muhasebe Dersine Yönelik Endişeleri Ve Tutumları: Ankara Hacı Bayram Veli Üniversitesi Örneği. *Marmara Üniversitesi Öneri Dergisi*, 506-528.
- Çil Koçyiğit, S., Doğan , E., & Taş, E. (2016). Sağlık Yönetimi Bölümü Öğrencilerinin Muhasebe Derslerindeki Başarılarını Etkileyen Faktörlerle İlgili Görüşlerini Belirlemeye Yönelik Bir Araştırma (Ankara Üniversitesi Ve Gazi Üniversitesi Örneği). *Mehmet Akif Ersoy Üniversitesi Sosyal Bilimler Dergisi*, 8(16), 222-252.
- Çil Koçyiğit, S., Şenel, G., & Bostancı, H. (2016). Sağlık Sektörünün Muhasebe Eğitiminden Beklentileri Ve Ankara Kamu Hastaneleri Uygulaması. *Marmara Üniversitesi Öneri Dergisi*, 12(45), 537-554.
- Fidan, C., & Ağırbaş, İ. (2019). Genel Muhasebe Dersini Alan Sağlık Yönetimi Öğrencilerinin Muhasebe Algılarına Yönelik Metaforlar: Muş Alparslan Üniversitesi Örneği. 3. *Uluslararası 13. Ulusal Sağlık Ve Hastane İdaresi Kongresi*, (S. 33-43). Sakarya.
- Kazak, G., & Erdemir, N. (2020). Muhasebe Bilgi Sisteminin Etkinliğinin Arttırılmasında Blok Zinciri Teknolojisinin Rolü. *Business & Management Studies: An International Journal*, 8(4), 464-481
- Keleş, D. (2021). Sağlık Kurumlarında Maliyet Yönetimi: Hastane İşletmeleri İçin Maliyet-Hacim-Kâr Analizi Üzerine Örnek Bir Uygulama. *Ünye İktisadi ve İdari Bilimler Fakültesi Dergisi*, 4(1), 1-11.
- Kısakürek, M. (2010). Hastane İşletmelerinde Bölüm Maliyet Analizi: Cumhuriyet Üniversitesi Tıp Fakültesi Hastanesinde Bir Uygulama. *Atatürk Üniversitesi İktisadi ve İdari Bilimler Dergisi*, 24(3), 229-256.
- Özer, Ö. (2019). Finansal Okuryazarlığın İncelenmesi: Sağlık Yönetimi Bölümü Öğrencilerinde Bir Uygulama. *Acu Sağlık Bilimleri Dergisi*, 253-259.
- Payziner, P. D. (2017). Finansal Okuryazarlığa İlişkin Tutum Ve Davranışların Belirlenmesi: Sağlık Yönetimi Bölümü Öğrencileri Üzerine Bir Araştırma. *Akademik Sosyal Araştırmalar Dergisi*, 5(58), 432-452.

- Savaş, A., & Ekergil, V. (2019). Üniversitelerin Sağlık Yönetimi Programlarında Muhasebe Ve Finans Derslerinin Yeri Ve Türkiye Uygulaması. *Alanya Akademik Bakış*, 3(2), 123-150.
- Serçemeli, M., & Kurnaz, E. (2020). Covid-19 Pandemi Döneminde Öğrencilerin Uzaktan Eğitim Ve Uzaktan Muhasebe Eğitime Yönelik Bakış Açıları Üzerine Bir Araştırma. *Ijossar Uluslararası Sosyal Bilimler Akademik Araştırmalar Dergisi*, 4(1), 40-53.
- Şahin, S. (2020). Türkiye’de Ki Üniversitelerde Sağlık Yönetimi Eğitiminde Muhasebe Ve Finansman Dersleri Durum Analizi. *İşletme Akademisi Dergisi*, 1(2), 102-124.
- Tugay Arslan, D., Yeşilaydın, G., Akyürek, Ç., & Esatoğlu, A. (2020). Ankara Üniversitesi Sağlık Bilimleri Fakültesi Sağlık Yönetimi Lisans Programı Derslerinin Ulusal Yeterlilik Çerçevesi Kapsamında Değerlendirilmesi. *H.Ü. Sağlık Bilimleri Fakültesi Dergisi*, 7(3), 324-344.

## THE EFFECT OF PERSON- ORGANIZATION FIT ON RESILIENCE: A RESEARCH IN THE COVID-19 PANDEMIC

by Murat Bař, Erzincan Binali Yıldırım University, [murat.bas@erzincan.edu.tr](mailto:murat.bas@erzincan.edu.tr)

**Abstract:** It is very important for them to get through the difficult days in the best way that they are going through in their businesses during the covid-19 pandemic process that the world is in. In this process, the psychological resilience of the employees, who are one of the most important components of the enterprises, is important. This study was carried out with the assumption that person-organization fit, which is the fit of the cultural characteristics of the enterprises with the values and personality traits of the individuals, is effective on the psychological resilience of the employees. In this direction, within the scope of the research, a questionnaire was applied to 394 people working in the Erzincan provincial health directorate affiliated to the Ministry of Health. According to the research results; A significant and positive effect of person-organization adjustment on psychological resilience was found.

**Keywords:** Person–organization fit, Resilience, Covid-19 Pandemic.

## Introduction

Due to the significant impact of covid-19 on the world, our country and people in 2020, it was declared a pandemic in the world and various measures had to be taken due to the disease and pandemic. It is observed that the pandemic has caused many deaths in the world, and as an important stressor both socially and individually, it affects people's lives negatively in psychological, social and economic dimensions. In this process, which also affects business life and employees, it is very important to increase the psychological resilience of the employees. In order to increase Psychological Resilience, it is necessary to ensure person-organization fit.

Person-organization fit occurs when people and businesses share similar characteristics (such as culture, values, goals) and believe that they mutually meet their needs. Today, business managers are aware of the fact that person-organization fit creates an important advantage for institutions in competitive business environments (Sekiguchi, 2004: 182). It is seen that most of the studies on resilience, which is defined as the ability to cope with difficult and threatening situations, focus on adolescents and students. Studies on resilience and its predecessors and successors are very few. In this study, the effects of person-organization fit on employees' resilience behavior were examined. In the research, firstly, the concepts of person-organization fit and resilience are explained. Then, the data obtained by using the survey technique for the personnel working in a public sector to determine the relationship between these concepts were analyzed and interpreted.

### 1. Person-Organization Fit

The fact that employees are one of the most important components that make up organizations and that person-organization fit has an explanatory power in people's attitudes and behaviors has made it necessary to investigate this concept (Bolander & Sandberg, 2013). There are various approaches to person-organization fit. These approaches are; "person-environment fit, complementary fit, expected ability fit, person-self fit, needs and satisfaction fit, person-culture fit, person-job fit, person-group fit, person-manager fit, and person-ethical climate fit" (Sökmen and Benk, 2020: 1349). The related paradigm is included in the literature with the examination of person-job fit in the context of "person-environment fit" Chatman (1989) argues that the relationship between personal phenomena in the form of goals, behaviors, individual characteristics of individuals and organizational phenomena such as goals, values, norms, organizational culture and organizational climate. states that the cohesion situation constitutes the person-organization fit. Kristof (1996) makes a broad definition in the form that individuals and businesses are in fit with their own value judgments and characteristics and their current goals, and that the characteristics of the employees resemble the corporate culture. Yahyagil (2005) emphasizes that person-organization fit is related to the personal value judgments of employees and the functions of organizational cultures of enterprises within the framework of organizational behaviors.

According to Kristof (1996), in order to ensure person-organization fit; (a) at least one party needs to meet the other party's needs, or (b) where there are commonalities in essential characteristics, or (c) both. It is insufficient to look at person-organization fit from a single perspective, since it is important for individuals to adapt to their organizations for their

efficiency in the jobs they work. Only the fit of people is not important for efficiency. Adaptation of organizations to people is also important in terms of efficiency (Sekiguchi and Huber, 2011: 204). It is possible to talk about two types of fit, integrative and complementary fit; Complementary fit is when individuals exhibit similar characteristics to those of other individuals in the environment and form integrity with the environment. Complementary fit is the fit that occurs when people complete the missing ones in the environment. Complementary fit is attitudinal and behavioral, while complementary fit is the fit of what is demanded/provided. Although there is a high correlation between these two fit types, they are considered as separate forms of fit (Seong et al., 2015). For this reason, complementary fit is mostly associated with person-job fit (Carless, 2005).

When the fit between the person and the organization is achieved, two-sided benefits are realized. When compliance is achieved, employees' job satisfaction, organizational commitment and organizational success levels are positively affected (Başaran, 2004). The performance level of the employees within the group will also be high (Westerman and Cyr, 2004: 252). Employees who believe that they are valued by their organizations and that rewards and wages are distributed fairly will think that their organization is in line with their values, and thus, person-organization fit will increase. In case of low person-organization fit, the motivation of the employees will decrease (Saether, 2019). Person-organization fit can reveal the impressions and effects of people about the values and cultures of organizations (Van Vianen et al., 2011). When the priorities and values of the employees are compatible with the priorities and values of the organization, the employees will be happier and they will be more willing to stay in the organization. When the values of the employees are compatible with the organizational values defined by the managers of the organizations, positive job attitudes in the form of job satisfaction and organizational commitment will increase by facilitating interpersonal interactions, information processing processes and effective communication (Ostroff et al., 2005). Person-organization fit is beneficial for individuals and organizations. A high level of cohesion enables people with similar values to feel more comfortable and competent in organizations. In terms of organizations, high person-organization fit also provides an increase in extra-role behaviors (Chatman, 1989: 344). In this direction, the relationship between person-organization fit and psychological resilience has been examined.

## **2. Resilience**

Although there are differences related to the definition of resilience, which is one of the concepts of positive psychology, resilience in general; It is defined as the capacity of individuals to cope with adversity, significant changes and threatening situations (Stewart et al., 1997). Murphy (1987: 101) states that resilience is related to the positive results of coping, such as competence and adaptability, hope and orientation to the future. Fraser, et al., (1999: 136) define resilience as “the ability to achieve unexpected success in difficult conditions and to adapt to extraordinary situations and conditions”. There are three common basic points in the definitions on psychological resilience. These; a) difficulty or risk, b) coping, positive adaptability, competence, and c) protective factors. From these points of view, resilience is a phenomenon that emerges as a result of the significant interactions of protective elements that

are associated with a positive adaptation behavior and contribute to the adaptation processes with the existing risk factors (Windle, 1999: 163).

Resilience is the state of psychological resistance and positive functionality exhibited in negative and distressing situations. The resilience process, which operates in a healthy way, ensures that you can stay balanced in stressful or traumatic situations and be stable at the physical and psychological level (Meichenbaum, 2012: 33). In order for psychological resilience to emerge, people need to be exposed to difficulties or risks, and at the end of this process, they have to adapt to the current situation and achieve success in different areas of their lives despite all negative conditions. People who have not been exposed to any traumatic event, but who are successful in various areas of life, are not considered strong, but only successful or competent people (Luthar & Cicchetti, 2000). It is stated that people with a high level of psychological resilience usually do not feel intimidated by stressful events, they can recover quickly, and they even emerge stronger from adverse environmental conditions and troubles each time (Henderson & Milstein, 1996). Psychological resilience is a form of behavior that can be learned and developed (Gürkan, 2006). In this direction, the hypothesis created by considering that person-organization fit increases psychological resilience is as follows:

H1: Person-organization fit affects resilience positively and significantly.

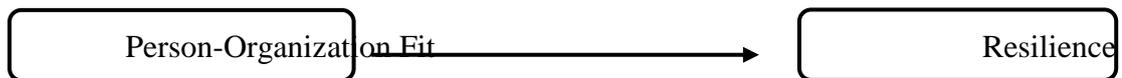


Figure 1: Research Model

### 3. METHOD

#### 3.1. Population and sample of the research

The population of the research consists of approximately 550 health workers of the Provincial Health Directorate working in the Erzincan center of the Ministry of Health operating in Erzincan. Convenience sampling method, one of the non-random sampling methods, was used in the study. In this context, the population was found to be 226 with a confidence interval of 550 and 95% (Ural and Kılıç, 2005:43). Between May 2021 and July

2021, 415 questionnaires were distributed to company employees by hand and online. However, after removing the wrong and incompletely filled questionnaires in the questionnaire application, 394 questionnaires were analysed.

### **3.2. Scales and analysis of data**

**Person-Organization Fit Scale:** In order to measure the person-organization fit perceptions of the participants in the study, the scale consisting of 4 unidimensional expressions, developed by Netemeyer et al. (1997) and adapted into Turkish by Elçi et al. (2008), was used.

**Resilience Scale:** The Brief Resilience Scale (BRS) was used to measure the resilience perception of the respondents. The scale was developed by Smith, Dalen, Wiggins, Tooley, Christopher, and Bernard (2008) with the aim of measuring the psychological resilience of employees. The validity and reliability study of the scale was adapted into Turkish by Doğan (2015). The scale is one-dimensional and consists of six statements.

Analysis of the data collected for the research Using the SPSS 22 program, the mean, standard deviation, reliability and correlation analyzes of the variables were examined. Then, using the AMOS 22 program, the conceptual data model was evaluated with multiple confirmatory analysis.

### **3.3. Results**

Information on the demographic characteristics of the employees participating in the survey is given in Table 1.

**Table 1:** Demographic Findings (N=394)

Properties	Categories	Frequency (N)	Percentile (%)
Age	18-26	24	6,1
	27-35	150	38,1
	36-44	144	36,5
	45 years and older	76	19,3
Gender	Female	147	37,3
	Male	247	62,7
Marital Status	Married	314	79,7
	Single	80	20,3
Education	Primary Education	34	8,7
	High School	111	28,2
	Associate Degree	59	14,8
	Licence	159	40,4
	Graduate	31	7,9
Work Year	0-10 years	135	34,3
	11-21 years	180	45,7
	22 years and up	79	20

In Table 1, the highest number of participants in the research is between 27-35 years of age, most of the participants are male in terms of gender, more married in terms of marital status, the participants are undergraduate graduates in terms of education level and the highest participation in terms of working years 11-21 employees between years.

In the study, the results of reliability analysis, correlation analysis and factor analysis of the variables were given. Since the analyzes related to the validity of the variables in the research were done before and accepted in the studies, it was not necessary to perform the validity analysis of the variables again.

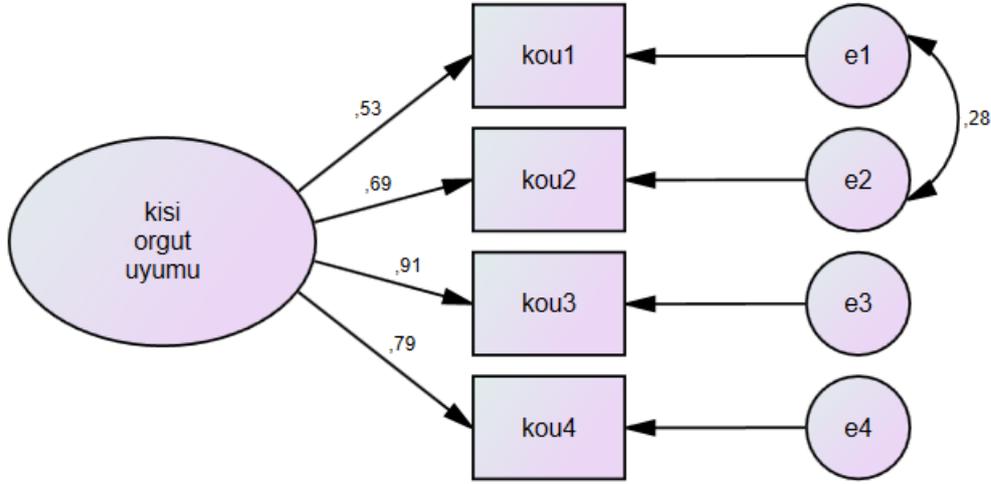
**Table 2:** Mean, Cronbach Alpha, Standard Deviation and Correlation Coefficients for Variables

	$\alpha$	M	Stan	K	P
	ean	ean	dart D.	ÖÜ	SAG
<b>ÖÜ</b>	0,867	3,53	0,596	-	
<b>SAG</b>	0,778	3,17	0,642	0,449**	-

\*\* =  $p < 0,01$  \* =  $p < 0,05$  **KÖÜ**: Person Organization Fit, **PSAG**: Resilience

Table 1 shows the means and standard deviations of the variables of the study. It is seen that the Cronbach Alpha coefficients of the BD (0.867) and PSAG (0.778) variables are above the reference value of 0.70 and are sufficient (Tavakol & Dennick, 2011). In addition, Table 1 shows that there is a positive relationship ( $r = 0.449$ ;  $p = 0.000$ ) between DI and PSAG at a significance level of 99%. In this context, it can be said that the level of l resilience increases

as the employee's perception of person-organization fit increases.



**Figure 2:** Person Organization Fit Scale Confirmatory Factor Analysis

When Figure 2 is examined, in order for the goodness of fit values of person-organization fit expressions to be acceptable,  $2 < \chi^2/df \leq 5$ ;  $RMSEA \leq .08$ ;  $CFI \geq .90$ ;  $NFI \geq .90$ ;  $IFI \geq .90$ ;  $TLI \geq .90$  index values are shown as reference (Meydan and Şeşen, 2015: 37). The fit index values of the manager support variable are given in Table 3 by making confirmatory factor analysis.

**Table 3: Person-Organization Fit Scale Goodness of Fit Values**

Değişkenler	X <sup>2</sup>	df	CMIN/ DF	GFI	AGFI	CFI	NFI	TLI	RMSEA
			≤5	≥.85	≥.80	≥.90	≥.90	≥.90	≤.08
Person Organization Fit (KÖU)	1,481	11	1,4841	0,998	0,979	0,999	0,997	0,995	0,037

Confirmatory factor analysis (CFA) was performed using the person-organization fit scale, AMOS 22, which consists of a total of 4 statements. The goodness of fit values of the person-organization fit scale were examined. When the obtained person-organization fit scale goodness of fit values are analyzed, as a result of applying modification to e1-e2 expressions, the goodness of fit values of the scale meet the referenced goodness of fit values.

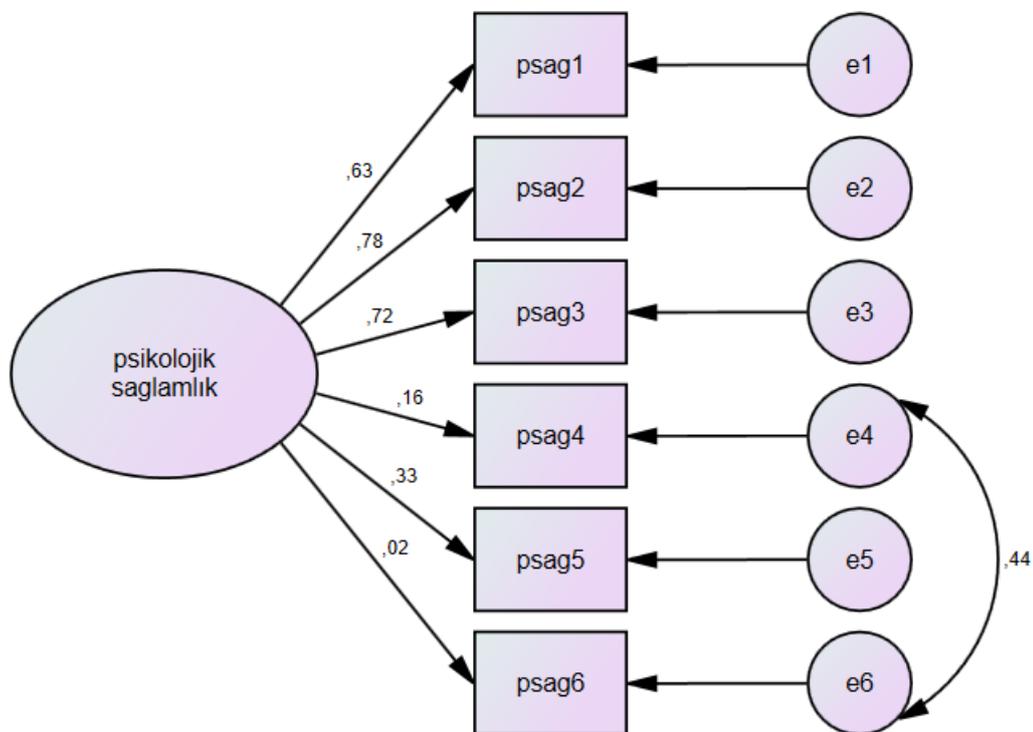


Figure 3: Resilience Scale Confirmatory Factor Analysis

When Figure 3 is examined, in order for the expressions of the resilience variable to have acceptable goodness-of-fit values,  $2 < \chi^2/sd \leq 5$ ;  $RMSEA \leq .08$ ;  $CFI \geq .90$ ;  $NFI \geq .90$ ;  $IFI \geq .90$ ;  $TLI \geq .90$  index values were taken as reference (Meydan and Şeşen, 2015: 37). Confirmatory factor analysis was performed on the Psychological Resilience variable, and the fit index values are shown in Table4.

Table 4: Goodness of Adjustment Values for the Resilience Scale

Değişkenler	X <sup>2</sup>	df	CMIN/ DF ≤5	GFI ≥.85	AGFI ≥.80	CFI ≥.90	NFI ≥.90	TLI ≥.90	RMSEA ≤.08
Resilience  (PSAG)	19,695	8	2,462	0,982	0,952	0,968	0,948	0,940	0,065

The resilience scale, which consists of a total of 6 items in Table 4, was tested with confirmatory factor analysis (CFA) using AMOS 22. When the goodness of fit values of the psychological resilience scale are examined, as a result of applying a modification to the e4-e6 expressions, the goodness of fit values of the scale meet the referenced goodness of fit values.

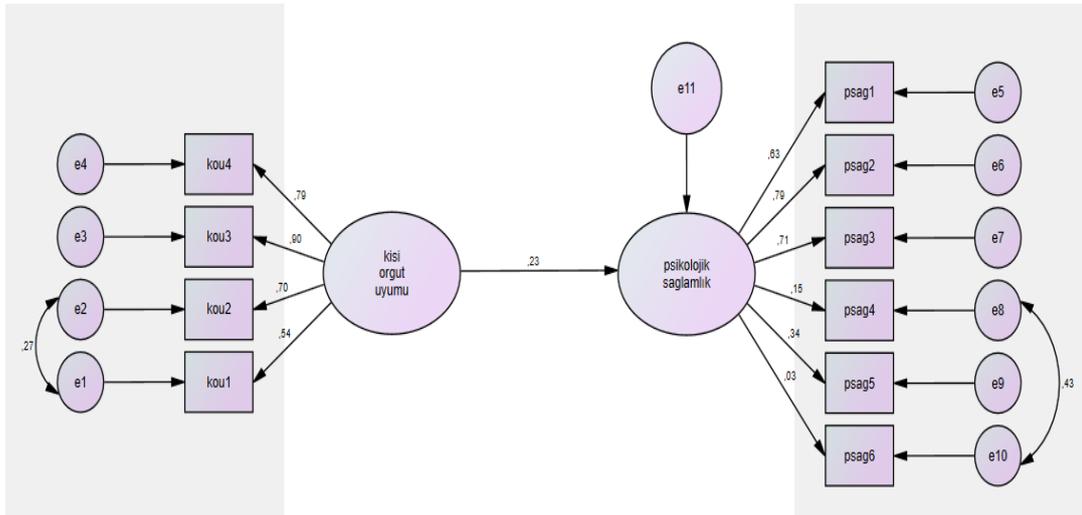


Figure 4. The Model Showing the Relationship between Person-Organization Fit and Resilience

In order to determine the suitability of the model created in Figure 4, the goodness of fit values of the model for the relationship between person-organization fit and psychological resilience were

analyzed. As a result of the analysis, it was seen that the values of the model were at an acceptable level and the values of goodness of fit are given in Table 5.

**Table 5: Goodness of Adjustment Values of Person-Organization Fit and Resilience Scales**

Variables	$\chi^2$	f	CMIN/ DF $\leq 5$	GFI $\geq .85$	AGFI $\geq .80$	CFI $\geq .90$	FI $\geq .90$	LI $\geq .90$	MSEA $\leq .08$
Model	3,786	2	,618	,957	,926	,948	,919	,926	,068

The standardized factor loads, standard error values, T values and significance (p) values of the relationship between person-organization adaptability and resilience are shown in Table 6.

**Table 6. Estimation Results for the Model**

Hypothesis	Yordayan Değişken	Yordanan Değişken	Standardize R.Y.	S.H.	T Değeri (CR)	P
H1	KÖÜ →	PSAG	,23	0,079	3,340	0,000

When Table 6 is examined, it is seen that the estimation results of the model support the H1 hypothesis. According to Table 6, person-organization adjustment positively affects psychological resilience. According to this result, it can be stated that the psychological resilience of the working individuals increases as the person-organization fit increases.

## Conclusion

In this study, the effect of person-organization fit on resilience in the Covid-19 pandemic was examined. In the literature, it has been seen that person-organization fit reveals positive work behaviors in businesses. A high person-organization fit is expected to prevent organizational employees from having positive attitudes and feelings of dissatisfaction or incompatibility (Cable & Edwards, 2004). Kristof-Brown et al., (2005) state that person-organization fit is related to organizational commitment, contextual performance, staff

turnover, and attractiveness of the organization. Arthur et al., (2006) revealed that there is a positive relationship between person-organization fit, organizational commitment and job satisfaction. In the current study, it was observed that as person-organization fit increases, psychological resilience increases.

Increasing resilience brings positive results for businesses. It has been revealed that employees with high resilience are effective in their communication skills (Ceyhan, 2006), have high life satisfaction (Eryılmaz, 2012), optimistic (Benard, 2004) and happier (Altuntaş & Genç, 2018).

## **REFERENCES**

- Altuntaş, S., & Gen., H. (2018). Mutluluğun yordayıcısı olarak psikolojik sağlamlık: öğretmen örnekleminin incelenmesi. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, 35(4), 936-948.
- Arthur, W. Jr., Bell, S. T., Doverspike, D., & Villado, A. J. (2006). The use of person-organization fit in employment decision making: An assessment of its criterion-related validity. *Journal of Applied Psychology*, 91(4), 786-801.
- Başaran, İ. E. (2004). *Yönetimde İnsan İlişkileri Yöneltil Davranış*, 3. Baskı, Ankara: Nobel Yayın Dağıtım.
- Benard, B. (2004). *Resiliency: What we have learned*. San Francisco: WestEd Publishers.
- Bolander, P., & Sandberg, J. (2013). How Employee selection decisions are made in practice. *Organization Studies*, 34(3), 285–311.
- Cable, D. M., & Edwards, J. R. (2004). Complementary and supplementary fit: A theoretical and empirical integration. *Journal of Applied Psychology*, 89(5), 822- 834.
- Carless, S. A. (2005). Person–job fit versus person–organization fit as predictors of organizational attraction and job acceptance intentions : A longitudinal study. *Journal of Occupational And Organizational Psychology*, 78, 411–429.
- Ceyhan, A. A. (2006). An investigation of adjustment levels of turkish university students with respect to perceived communication skill levels. *Social Behavior and Personality*, 34(4), 367-379.
- Chatman, J. A. (1989). Improving interactional organizational research: a model of person organization fit. *Academy of Management Review*, 14 (3), 333-349.

- Doğan, T. (2015). Kısa psikolojik sağlık ölçeği'nin Türkçe uyarlaması: Geçerlik ve güvenirlik çalışması. *The Journal of Happiness & Well-Being*, 3(1), 93-102.
- Elçi M, Alpkan L, Çekmecelioğlu GH. (2008). The influence of person organization fit on the employee's perception of organizational performance. 4th International Strategic Management Conference, Sarajevo, Bosnia-Herzegovnia: 587-593.
- Eryılmaz, S. (2012). Üniversite öğrencilerinde psikolojik sağlamlığı yordamada yaşam doyumunu, benlik saygısı, iyimserlik ve kontrol odağının incelenmesi. Yayımlanmamış yüksek lisans tezi. Muğla Sıtkı Koçman Üniversitesi, Muğla.
- Fraser, M. W., Richman, J. M. ve Galinsky, M. J. (1999). Risk, protection and resilience: toward a conceptual framework for social work practice. *Social Work Research*, 23, 129-208.
- Gürkan, U. (2006). Grupla psikolojik danışmanın üniversite öğrencilerinin yılmazlık düzeylerine etkisi. Yayımlanmamış doktora tezi. Ankara Üniversitesi, Ankara.
- Henderson, N., & Milstein, M. M. (1996). Resiliency in schools: Making it happen for Students and educators. Thousand Oaks, CA: Corwin Press, Inc.
- Kristof, A.L. (1996). Person-organization fit: an integrative review of its conceptualizations, measurement, and implications. *Personnel Psychology*, 49 (1), 1- 49.
- Kristof-Brown, A. L., Zimmerman, R. D. ve Johnson, E. C. (2005). Consequences of individuals' fit at work: A meta analysis of person-job, person-organization, person-group and person-supervisor fit. *Personnel Psychology*, 58, 281-342.
- Luthar, S. ve Cicchetti, D. (2000). The construct of resilience: Implications for interventions and social policies. *Development and Psychopathology*, 12, 857-885.

- Meichenbaum, D. (2012). Important facts about resilience: A consideration of research findings about resilience and implications for assessment and treatment. Melissa Institute, 2-33.
- Meydan, C., ve Şeşen, H. (2015). *Yapısal eşitlik modeli amos uygulamaları*: Detay Yayıncılık: Ankara.
- Murphy, L. B. (1987). Further reflections on resilience. (Ed: E. J. Anthony ve B. J. Cohler) *The Invulnerable Child*. New York: The Guilford Press.
- Netemeyer RG, Boles JS, McKee DO, McMurrian R. (1997). An investigation into the antecedents of organizational citizenship behaviors in a personal selling context. *Journal of Marketing*, 61:85-98.
- Ostroff, C., Shin, Y. Y., & Kinicki, A. J. (2005). Multiple perspectives of congruence: Relationship between value congruence and employee attitudes. *Journal of Organizational Behavior*, 26, 591-623.
- Saether, E. A. (2019). Motivational antecedents to high-tech r&d employees' innovative work behavior: self-determined motivation, person-organization fit, organization support of creativity, and pay justice. *The Journal of High Technology Management Research*, 30(2), 1-12.
- Sekiguchi, T. (2004). Person-organization fit and person-job fit in employee selection: A review of the literature. *Osaka Keidai Ronshu*, 54(6), 179-196.
- Sekiguchi, T. ve Huber, V.L. (2011). The use of person-organization fit and person-job fit information in making selection decisions, *Organizational Behavior and Human Decision Processes*, 116, 203-216.

- Sekiguchi, T., & Huber, V. L. (2011). The use of person–organization fit and person– job fit information in making selection decisions. *Organizational Behavior and Human Decision Processes*, 116(2), 203-216.
- Seong, J. Y., Kristof-Brown, A. L., Park, W. W., Hong, D. S., & Shin, Y. (2015). Person group fit: Diversity antecedents, proximal outcomes, and performance at the group level. *Journal of Management*, 41(4), 1184–1213.
- Silverthorne, C. (2004). The impact of organizational culture and person-organization fit on organizational commitment and job satisfaction in Taiwan. *Leadership & Organization Development Journal*, 25(7), 592-599.
- Smith, B. W., Dalen, J., Wiggins, K., Tooley, E., Christopher, P., & Bernard, J. (2008). The brief resilience scale: assessing the ability to bounce back. *International journal of behavioral medicine*, 15(3), 194-200.
- Sökmen, A., & Benk, O. (2020). Dönüşümsel liderlik, kişi-örgüt uyumu ve iş tatmini ilişkisi: Kamu çalışanlarına yönelik araştırma. *İşletme Araştırmaları Dergisi*, 12(2), 1347-1357.
- Stewart, M., Reid, G. J. ve Mangham, C. (1997). Fostering children's resilience. *Journal of Pediatric Nursing*, 12 (1), 21-31.
- Tavakol, M., Dennick, R. (2011). Making Sense of Cronbach’s Alpha. *International Journal of Medical Education*, 2, 53-55.
- Ural, A. ve Kılıç, İ. (2005). Bilimsel Araştırma Süreci ve Spss ile Veri Analizi, Detay Yayıncılık, Ankara.
- Van Vianen, A. E., Shen, C. T., & Chuang, A. (2011). Person–organization and person–supervisor fits: Employee commitments in a Chinese context. *Journal of Organizational Behavior*, 32(6), 906-926.

Westerman, J. W., & Cyr, L. A. (2004). An integrative analysis of person–organization fit theories. *International Journal of selection and assessment*, 12(3), 252-261.

Windle, M. (1999). Critical conceptual and measurement issues in the study of resilience. (Ed: Glantz, M. D. ve Johnson, J. L.) Resilience and development: Positive life adaptations. New York: Kluwer Academic/Plenum Publishers.

Yahyagil, M. Y. (2005). Birey organizasyon uyumu ve çalışanların iş tutumlarına etkisi. *Öneri Dergisi*, (4), 137-149.