

ISRJ Journal

The Journal of International Scientific Researches

Uluslararası Bilimsel Arařtırmalar Dergisi

Year 2020 Volume 5 Number AI



ISSN:2458-8725

The Journal of International Scientific Researches

Uluslararası Bilimsel Arařtırmalar Dergisi

Year / Yıl: 2020
Volume / Cilt: 5
Number / Sayı: Additional Issue

Chief Editor / Bař Editör
Dr. Salih Yıldız

Editorial Board / Editörler Kurulu
Dr. M. Hanefi Topal
Dr. Muhlis Özdemir
Dr. Emel Yıldız
Dr. Büřra Tosunođlu
Dr. Orkun Demirbađ

Secretariate / Sekretery
Mustafa Zuh

Contact / İletişim
Gümüşhane Üniversitesi
İktisadi ve İdari Bilimler Fakültesi
Bađlarbaşı Mah. 29100 Merkez / Gümüşhane
Tel: 0456 233 1000 (Dahili: 2203) Fax: 0456 233 7553
journalofisr@gmail.com
www.isr-journal.com

© Her hakkı saklıdır. "The Journal of International Scientific Researches" dergisi yılda üç kez yayımlanan bilimsel, uluslararası indeksli ve hakemli bir dergidir. Dergide yayımlanan çalışmalardaki görüş ve düşünceler yazarların kendilerine ait olup hiçbir şekilde derginin görüş ve düşüncesi olarak ifade edilemez. Dergideki çalışmalar sadece referans gösterilerek kullanılabilir.

ISSN
2458-8725

The Journal of International Scientific Researches
Publication and Advisory Board
Yayın ve Danışma Kurulu

Dr. Avinash Pawar	University of Pune
Dr. Bünyamin Er	Karadeniz Teknik Üniversitesi
Dr. Daria Doroshkevich	National Technical University of Ukraine
Dr. Davran Yurdashev	İktisat ve Girişimcilik Üniversitesi
Dr. Ekrem Cengiz	Gümüşhane Üniversitesi
Dr. Fazıl Kırkbir	Karadeniz Teknik Üniversitesi
Dr. Hans Jürgen Krysmanski	University of Münster
Dr. Hasan Alacacıoğlu	İstanbul Üniversitesi
Dr. Hilmi Erdoğan Yayla	Giresun Üniversitesi
Dr. Jagbir Singh Kadyan	University of Delhi
Dr. Killion Munyama	University of Economy WSG
Dr. Kyung Hyan Yoo	William Paterson University
Dr. Mehmet Ferhat Özbek	Gümüşhane Üniversitesi
Dr. Mohamed El-Hodiri	Kansas University
Dr. Mohammad Hudaib	Glasgow University
Dr. Muhammed Asif Yoldaş	Avrasya Üniversitesi
Dr. Musa Pınar	Valparaiso University
Dr. Mukesh Chaudhry	Indiana University of Pennsylvania
Prof. Dr. Olha Ilyash	National Technical University
Dr. Ömer Torlak	İstanbul Ticaret Üniversitesi
Dr. Piotr Prus	UTP University of Science and Technology
Dr. Rasim Yılmaz	Namık Kemal Üniversitesi
Dr. Remzi Altunışık	Sakarya Üniversitesi
Dr. Roszaini Haniffa	Heriot Watt University
Dr. Thomas Li-Ping Tang	Middle Tennessee State University

Indexing / Endeksler

"The Journal of International Scientific Researches"

Directory of Open Access Journal (DOAJ), Index Copernicus, Directory of Research Journals Indexing (DRJI), SOBIAD, ASOS Index, Scientific Indexing Services (SIS), International Institute of Organized Research (I2OR), Journal Factor (JF), Cosmos Impact Factor (Cosmos), Cite Factor
endekslerinde taranmaktadır.

The Journal of International Scientific Researches

Referees of Issue

Sayı Hakemleri

Dr. Emrullah Mete	Giresun Üniversitesi
Dr. Bilge Leyli Demirel	Yalova Üniversitesi
Dr. Büşra Tosunoğlu	Gümüşhane Üniversitesi
Dr. Ersin Kurnaz	Erzincan Binali Yıldırım Üniversitesi
Dr. İbrahim Karaaslan	Gümüşhane Üniversitesi
Dr. Ebru Onurlubaş	Trakya Üniversitesi
Dr. Derya Öztürk	Ordu Üniversitesi
Dr. Ahmet Mutlu Akyüz	Gümüşhane Üniversitesi
Dr. Fazıl Kırkbir	Karadeniz Teknik Üniversitesi
Dr. Muhlis Özdemir	Gümüşhane Üniversitesi
Dr. Turgut Şahinöz	Ordu Üniversitesi
Dr. Gül Yeşilçelebi	Gümüşhane Üniversitesi
Dr. Tarhan Okan	Bandırma Onyediy Eylül Üniversitesi
Dr. Emrah Koparan	Amasya Üniversitesi
Dr. Aydın Kıvanç	Gümüşhane Üniversitesi
Dr. Saime Şahinöz	Ordu Üniversitesi
Dr. Emel Yıldız	Gümüşhane Üniversitesi
Dr. Ömer Akkuş	Samsun Üniversitesi
Dr. Ramazan Ünlü	Gümüşhane Üniversitesi

Teşekkür

"The Journal of International Scientific Researches"
dergimizin bilimsel niteliğinin arttırılması için yapmış olduğunuz katkılardan dolayı siz değerli bilim insanlarına şükranlarımızı sunarız

Contents / İçindekiler

Musa Pınar 1 - 5

Research Article / Araştırma Makalesi

University Branding and Measuring Brand Equity: Conceptual Framework and Empirical Studies

Dariia Doroshkevych, Olha Ilyash 6 - 14

Research Article / Araştırma Makalesi

The Investigation of Emotional Intelligence Level in Non-Government Organization with the Use of Hall's Test

Fouad Kamar, Abdelmajid Charrass, Salwa Bahyaoui..... 15 - 21

Research Article / Araştırma Makalesi

Post-Covid Tourism, A Consensual Re-Reading of the Economic Outlook Application of the Delphi Method to "Morocco" Destination

Ali Tehci, Yusuf Ersoy 22 - 27

Research Article / Araştırma Makalesi

Investigation of Digital Retail Consumer Complaints in The Food Industry During COVID-19: Market Chain Example of Turkey

COVID 19 Sürecinde Gıda Sektöründe Dijital Perakende Tüketici Şikayetlerinin İncelenmesi: Türkiye Marketler Zinciri Örneği

Abdulkadir Alıcı, Güven Sevil..... 28 - 46

Research Article / Araştırma Makalesi

Analysis of Internal Financial Factors Affecting Stock Price in Airline Businesses

Havayolu İşletmelerinde Hisse Senedi Fiyatını Etkileyen İşletme İçi Finansal Faktörlerin Analizi

Gülşah Ayvazoğlu, Sevil Cengiz..... 47 - 54

Research Article / Araştırma Makalesi

Preparation and Volunteering Level Determination for CBRN: The Case of Gümüşhane Province

KBRN İçin Hazırlılık ve Gönüllülük Düzeyi Belirleme Çalışması: Gümüşhane İli Örneği

Lukmon Fasasi 55 - 65

Research Article / Araştırma Makalesi

Effect of Employees Performance on Sales in Bank of Palestine

Müge Manga..... 66 - 77

Research Article / Araştırma Makalesi

MENA Ülkelerinde Finansal Gelişme ve Yoksulluk İlişkisi

The Relationship between Financial Development and Poverty in MENA Countries

Gülşah Dönmez, Büşra Tosunoğlu, Selim Cengiz 78 - 86

Research Article / Araştırma Makalesi

**Bağımsız Denetim Kalitesi Konusunda Ulusal ve Uluslararası Dergiler Üzerine
Bibliyometrik Bir Araştırma**

A Bibliometric Research on National and International Journals on Audit Quality

Mazhar Oyanık, Ekrem Cengiz 87 - 101

Research Article / Araştırma Makalesi

Afet Bilinci ve Kader İlişkisi: Gümüşhane Örneği

Disaster Consciousness and Belief in Fate: Gümüşhane Example

University Branding and Measuring Brand Equity: Conceptual Framework and Empirical Studies

Abstract

In highly competitive marketplace, branding and brand management have become increasingly important as organizations seek competitive advantage. As colleges and universities have faced an increased competition, university administrators have realized that relying only on external marketing and branding efforts are not sufficient strategies for building strong university brands and brand equity. Based on review of literature, this paper presents a summary of a brand ecosystem as conceptual and the results of empirical studies that utilize consumer-based brand equity (CBBE) and brand ecosystem framework to understand university branding and measuring university brand equity. The results of the empirical studies indicate that universities are complex systems of sub-brands, thus, managing these subsystems require consideration of all relevant brand equity dimensions as a holistic way in a brand ecosystem framework showing their direct and indirect relationships in creating a strong university brand and brand equity. These findings offer important insights that could have strategic implications for developing successful university branding strategies.

Introduction

In today's global marketplace, the most distinctive skill of marketers is their ability to build and manage brands (Kotler and Armstrong, 2010). Over the years, brands have served as effective carriers of functional and symbolic information about goods, services, and experiences (Oh et al., 2020). A brand functions as a powerful differentiator for the business and as a decision-making tool for customers. In highly competitive marketplace, branding and brand management have become increasingly important as organizations seek competitive advantage. A powerful brand enjoys a high level of consumer awareness and loyalty (mind share and heart share), and it forms the basis for building strong and profitable customer relationship. The real value of a strong brand is its ability to capture customer preference and loyalty. As a result, recently the concept of brand equity has received vast attention due to the growing nature of competition in domestic and international markets. Brand equity is a key intangible asset (Ambler et al., 2002) that arises from past brand building activities. Since the concept of brand equity is the foundation of any branding strategy, it has become the focus of many branding studies (Rosenbaum-Elliott et al., 2011). All this contributes to an increase of the requirements for the competence of a manager, and especially with regard to their social and emotional intelligence.

Aaker (1991, p.15) defined brand equity as "a set of assets and liabilities linked to a brand, its name, and symbol, which adds or subtracts from the value provided by a product or service to a firm and/or that firm's customers". Keller (1993, p.8), who coined the term customer-based brand equity (CBBE), defined brand equity based as "the differential effect of brand knowledge on consumer response to the marketing of the brand". A brand with strong equity is easily recognized and recalled, and more importantly, creates a distinction strong enough to generate favorable responses towards the brand (Keller, 2013). The consensus is that the value of a brand ultimately

Musa Pınar

Professor of Marketing and Paul H. Brandt Professor of Business
College of Business, Valparaiso
University, USA, musa.pinar@valpo.edu

Article Type / Makale Türü

Research Article / Araştırma Makalesi

Anahtar Kelimeler

Üniversite markalaşma, Üniversite marka değeri, Marka ekosistemi, Üniversite TTMD, Üniversite marka değeri ölçümleri

Keywords

University branding, University brand equity, Brand ecosystem, University CBBE, University brand equity measures

Information

This article was presented as a paper at the International Scientific Research Congress held in Gümüşhane on 03-05 December.

Submitted: 13 / 12 / 2020

Accepted: 28 / 12 / 2020

resides in the minds of consumers; thus, consumers are the real owners of the brands. Consequently, what consumers perceive as the value may differ from what the brand owner intends to offer (Md Noor et al., 2019). According to Keller (2013), CBBE happens when consumers have high awareness of and familiarity with the brand and have strong, favorable, and unique associations for the brand. Aaker (1991) originally conceptualized brand equity as a multidimensional concept that includes brand awareness, brand associations, perceived quality, and brand loyalty, which are the most used CBBE dimensions in brand equity research.

1. University Branding and Brand Equity

In recent years, experiencing an increase in domestic and international competition, a negative global economic environment, and a decrease in enrollments, colleges and universities have faced an increased competition (Whisman, 2007). As a result, university administrators have realized that relying only on external marketing and branding efforts are not sufficient strategies for building strong university brands and brand equity (Pinar et al., 2014), so they are turning to branding efforts as the relatively simple promotional approaches of the past no longer seem to work. For Higher Education Institutions (HEIs), branding of universities as a recent marketing tool aims to attract, engage, and retain students and position universities (Wilson and Elliot, 2016; Sultan and Wong, 2014). A university brand reflects the university's ability to fulfill students' needs and creates trust in its capacity to deliver the promised services (Nguyen et al. 2016). Also, universities as service organizations depend on their unique service properties to differentiate themselves from the competition. In recent years, different topics related to university branding and university brand equity have been addressed by different studies show the growing interest in branding of HEIs. While the prior studies provide insights into understanding of the specific areas of university branding, they do not capture the holistic effects of the university brand equity dimensions (core and supporting) and the direct and indirect relationships and interactions between the dimensions presented in the brand ecosystem (Pinar et al., 2011).

Ng and Forbes (2009) suggested a gap model for the university learning experience based on the service quality literature, recognizing the various parties involved in the creation of the experience, including the students themselves. They highlight the complexity of the university experience as it is co-created, emergent, unstructured, interactive, and uncertain, and not all students share the same goals and orientation (academic, personal, vocational, social) with respect to university experience. Ng and Forbes (2009) proposed a model to capture student university experience that identified core and supporting academic value-creation dimensions. The brand ecosystem framework proposed by Pinar et al. (2011) includes the core and supporting brand equity dimensions of Ng and Forbes (2009), where academic-student interaction is often an important aspect of learning experience in building university brand. From a strategic perspective, brands can be designed to deliver greater customer value by building a brand ecosystem that includes the value networks and their interactions at each stage of brand value building and delivery. Brand ecosystem is a set of different activities that contribute to building a strong brand that cover all the stages of value creation from initial design idea to the final consumer brand experience (Pinar and Trapp, 2008). The core university brand equity dimensions identified are brand awareness, perceived quality, brand association, brand trust, learning environment, emotional environment, university reputation, and brand loyalty, whereas the supporting university brand equity dimensions identified are library services, dining services, residence hall, and physical facilities.

2. University CBBE - Empirical Studies

The brand ecosystem framework for university branding has been used in two empirical studies, where one study in Turkey (Pinar et al., 2020) used only the core university brand equity dimensions and the other study in the United States (Girard and Pinar, 2020a) included both the core and supporting university brand equity dimensions. These studies utilized the CBBE theory and the brand ecosystem framework to develop measurements and tested the relationships between core and supporting brand equity dimensions that are significant and important in building brands of

universities, and they are valid and reliable measures of the CBBE dimensions of university branding. The results of both studies supported the assertion that universities are complex systems of various sub-brands that require brand management by considering all relevant university brand equity dimensions in a holistic perspective in a brand ecosystem framework (Pinar et al., 2011) with their direct and indirect relationships. These findings indicate that it is essential to have the holistic approach to examining university brand equity to understand and capture the complex bundles of benefits in creating a strong university brand and brand equity. The findings from the U.S. study confirm the assertion by Ng and Forbes (2009) that the core university brand equity dimensions cannot function properly without the supporting dimensions, as they work together, having direct and indirect effects in an integrated, dynamic way to build the brand in higher education and university brand equity. One of the unexpected findings is that while emotional environment in the U.S. study directly influences brand trust and indirectly brand loyalty, it is directly influenced by other BE dimensions, emotional environment in the Turkish study does not influence the brand trust, university reputation, or brand loyalty, which is interesting for understanding cross-cultural differences.

In another study (Girard and Pinar, 2020b) compared the importance and performance of university brand equity dimensions to determine if any significant gaps exist between student perceptions of importance (expectations) and performance of the university brand equity dimensions. The results show an existence of gaps for both all core and supporting university brand equity dimensions, indicating that student expectations are not met, which could have significant implications for creating a strong university brand. For example, university reputation had the largest gap, which the reputation could be improved through strengthening brand awareness, brand associations, brand loyalty, perceived quality, learning environment, brand trust, and emotional environment. Of the supporting factors, residence hall had the largest gap, suggesting a need to improve on residence halls, as well as physical facilities, dining services and library services, especially, residence halls and dining services are important to students living on campus and especially to female students.

Discussion and Conclusion

As stated above, the results of both studies (Pinar et al., 2020; Girard and Pinar, 2020a) show that universities include various sub-brands as complex systems that require university administrators to consider all relevant university brand equity dimensions in a holistic perspective (Hemsley-Brown and Goonawardana, 2007; Rauschnabel et al., 2016) in a brand ecosystem framework (Pinar et al., 2011), which show their direct and indirect relationships. Therefore, it is essential to have a holistic approach to examining university brand equity to understand and capture the complex bundles of benefits, most notably academic and social benefits (Palmer et al., 2016) in creating a strong university brand and brand equity. The findings from a study by Girard and Pinar (2020a) confirm the importance of the supporting dimensions for properly functioning of the core dimensions (Ng and Forbes (2009)). Both studies indicate that Brand loyalty is the dependent variable in the model of both studies, confirming as one of requirements for strong brands, and influenced directly and indirectly by BE dimensions. In addition, Brand awareness is an important factor for creating a strong university brand and brand equity as it directly and/or indirectly influences the other brand equity dimensions, which is consistent with the brand equity conceptualization (Aaker, 1991, 1996, Keller, 1993, 2013). While higher education institutions could utilize social media to increase awareness and build university brand (i.e., Belanger et al., 2014; Pringle and Fritz, 2019), they should avoid any deceptive communications, as it erodes the brand equity of these institutions in the long run (Joyvice et al., 2019).

Perceived quality as measured with all faculty items was the critical role of faculty with students' learning experience and emphasizes their importance for university branding. This is consistent with prior research (i.e., Cheng and Tam, 1997; Aggarwal-Sharma et al., 2013) that highlighted the relationship between the students, faculty, and staff as one of the main determinants of the university reputation and its image. Also, while in a study by Girard and Pinar (2020a),

emotional environment influences brand loyalty through brand trust, this was not the case in Pinar et al. (2020) study that the emotional environment does not have any influence on brand loyalty, which is interesting for understanding cross-cultural differences. Given the importance of emotion for developing a strong university brand and brand equity, is the university administrators in Turkey should develop strategies to create a strong emotional bond between university and students based on the desired learning experience in co-creation process (Dollinger et al., 2018), and positive experiences with their peers during social life of the campus (Gibson, 2010).

These empirical studies provide some insights about the core and supporting university brand equity dimensions, and their direct and indirect complex relations that could be beneficial for university administrators in creating a strong university brand and brand equity. However, the authors suggest that a caution must be exercised when interpreted the findings of their studies with their limitations. Despite above limitations, however, they state that university administrators can benefit from the findings of the empirical studies and a gap analysis in making both strategic and operational decisions for creating a strong university brand.

References

- Aaker, D. (1991), *Managing Brand Equity*. Free-Press, New York, NY.
- Aaker, David (1996), *Building Strong Brands*. Free-Press, New York, NY
- Aggarwal-Sharma, A., Rao, V.R., and Popli, S. (2013), "Measuring consumer-based brand equity for Indian business schools", *Journal of Marketing for Higher Education*, Vol. 23, No.2, pp. 175-203. Doi: 10.1080/08841241.2013.866609
- Ambler, T., Bhattacharya, C. B., Edell, J., Keller, K. L., Lemon, K. N., and Mittal, V. (2002), "Relating brand and customer perspectives on marketing management," *Journal of Services Research*, Vol. 5, No. 1, pp. 13-25.
- Belanger, C., Bali, S., and Longden, B. (2014), "How Canadian universities use social media to brand themselves", *Tertiary Education and Management*, Vol. 20, No. 1, pp. 14-29.
- Cheng, Y. C., & Tam, W. M. (1997). Multi-models of quality in education. *Quality assurance in Education*, Vol. 5 No. 1, pp. 22-31.
- Dollinger, M. Lode, J., and Coastes, H. (2018), "Co-creation in higher education: Towards a conceptual model", *Journal of Marketing for Higher Education*, Vol. 28, No. 2, pp. 210-231.
- Gibson, A. (2010), "Measuring business student satisfaction: a review and summary of the major predictors", *Journal of Higher Education Policy and Management*, Vol. 32, No. 3, pp. 251-259.
- Girard, T. and Pinar, M. (2020a), "An empirical study of the dynamic relationships between the core and supporting brand equity dimensions in higher education", *Journal of Applied Research in Higher Education*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/JARHE-04-2020-0097>
- Girard, T., Pinar, M. (2020b), Importance-Performance Gap Analysis of the University Brand Equity Dimensions, the Atlantic Marketing Association 2020 Virtual Conference (Competitive Track), October 2.
- Hemsley-Brown, J. and Goonawardana, S S. (2007), "Brand harmonization in the international higher education market", *Journal of Business Research*, Vol. 60, No. 9, pp. 942-948.
- Joyvice, C., Atemnkeng, J. T., Sama, M. C., Mbu, S. A., & Neba, N. B. (2019), "The effect of deceptive marketing communication on the brand equity of private higher education institutions (PHEI's) in the Northwest and Southwest Regions of Cameroon", *International Journal of Social and Administrative Sciences*, Vol. 4, No.1, pp. 1-13.
- Keller, K. L. (1993), "Conceptualizing, measuring and managing customer-based brand equity", *Journal of Marketing*, Vol. 57, No. 1, pp. 1-22.
- Keller, K. L. (2013), *Strategic Brand Management: Building, Measuring, and Managing Brand Equity*, 4th ed. Prentice-Hall, Upper Saddle River, NJ.
- Kotler, P. and Armstrong, G. (2012), *Principles of Marketing*. 13th ed., Prentice-Hall, Upper Saddle River, NJ.
-

-
- Md Noor, S., Manan, K. A., & Kuthoos, H. M. A. (2019), "Assessing corporate brand equity of public universities", *Jurnal Komunikasi: Malaysian Journal of Communication*, Vol 35, No. 3, pp. 283-299.
- Ng, I.C. L. and Forbes, J. (2009), "Education as service: The understanding of university experience through the service logic", *Journal of Marketing for Higher Education*, Vol. 19, No. 1, pp. 38-64.
- Nguyen, B., X. Yu, Melewar, T.C. and Hemsley-Brown, J. (2016), "Brand ambidexterity and commitment in higher education: An exploratory study", *Journal of Business Research*, Vol. 69, No. 8, pp. 3105-3112.
- Oh, T.T., Keller, K.K., Neslin, S.A., Reibstein, D.J., and Lehmann, D.R. (2020), "The past, present, and future of brand research", *Marketing Letters*, published online (June 04), <https://doi.org/10.1007/s11002-020-09524-w>.
- Palmer, A., Koenig-Lewis, N., and Asaad, Y. (2016), "Brand identification in higher education: A conditional process analysis", *Journal of Business Research*, Vol. 69, No. 8, pp. 3033-3040.
- Pinar, M. and Trapp, P. (2008), "Creating competitive advantage through ingredient branding and brand-ecosystem: The case of Turkish cotton and textiles", *Journal of International Food & Agribusiness Marketing*, Vol. 20, No. 1, pp. 29-56.
- Pinar, M, Trapp, P., Girard, T., and Boyt, T. E. (2011). "Utilizing brand-ecosystem for branding and building brand equity in higher-education", *International Journal of Educational Management*, Vol. 25, No. 7, pp. 724-739.
- Pinar, M, Trapp, P., Girard, T., and Boyt, T. E. (2014), "University brand equity: An empirical investigation of its dimensions", *International Journal of Educational Management*, Vol. 28, No. 6, pp. 616-634. <https://doi.org/10.1108/IJEM-04-2013-0051>
- Pinar, M., Girard, T., and Basfirinci, C. (2020), "Examining the relationship between brand equity dimensions and university brand equity: An empirical study in Turkey", *International Journal of Educational Management*, Vol. 34, No. 7, (forth coming). <https://doi.org/10.1108/IJEM-08-2019-0313>
- Pringle, J. and Fritz, S. (2019), "The university brand and social media: using data analytics to assess brand authenticity", *Journal of Marketing for Higher Education*, Vol. 29, No. 1, pp. 19-44. DOI: 10.1080/08841241.2018.1486345.
- Rauschnabel, P. A., Krey, N., Babin, B. J., and Ivens, B. S. (2016), "Brand management in higher education: The university brand personality scale", *Journal of Business Research*, Vol. 69 No. 8, pp. 3077-3086.
- Rosenbaum-Elliott, R., Percy, L., and Pervan, S. (2011), *Strategic Brand Management*, 2nd ed. Oxford University Press, Oxford, UK.
- Sultan, P. and Wong, H. Y. (2014), "An integrated-process model of service quality, institutional brand and behavioural intentions: The case of a university", *Managing Service Quality: An International Journal*, Vol. 24, No. 5, pp. 487-521.
- Whisman, R. (2009), "Internal branding: A university's most valuable intangible asset", *Journal of Product and Brand Management*, Vol. 18, No. 5, pp. 367-370.
- Wilson, E.J. and Elliot, E. A. (2016). "Brand meaning in higher education: Leaving the shallows via deep metaphors", *Journal of Business Research*, Vol. 69, No. 8, pp. 3058-3068.
-

The Investigation of Emotional Intelligence Level in Non-Government Organization with the Use of Hall's Test

Abstract

This article is devoted to the study of emotions and their role in leadership and the process of changes. A review of literature is conducted and the main definitions of emotions and emotional intelligence are revealed. The importance of studying the level of emotional intelligence in companies is substantiated. The basic methods with the help of which one can estimate the level of emotional intelligence are described.

The analysis of the NGO "100 percent of Life", which is engaged in support of HIV/AIDS positive people, is conducted. The structure of personnel is analysed and staff turnover is calculated. It is determined that emotions play a particularly important role for employees of the organization. Emotions influence the efficiency of the consultants' work and the style of managing them. With the help of Hall's test, the level of emotional intelligence is determined. Further studies have shown that women in this organization have a higher level of emotional intelligence than men have, and identified those, whose emotional intelligence is at the highest level. Based on the conclusions, the structure of management in the organization has been significantly changed and training to develop emotional intelligence has been established.

Introduction

Until recently, in the business world, one treated feelings and emotions with contempt; they were not understood, they were ignored, suppressed. Unfortunately, the display of emotions is still considered a manifestation of weakness, inability to keep one's head. Emotional people are considered to be those who do not understand the real world, which is built on facts only. Even Bertrand Russel asserted that "the degree of one's emotions varies inversely with one's knowledge of the facts» and many top executives agree with it.

However, is it true that emotions are so unnecessary in today's business world? Feelings and emotions are one of the most important parts of the human personality, and in our lives, they play the same crucial role as logic and rational thinking. Emotions perform the function of feedback, through which we receive information about the quality of our lives and our state.

Fortunately, in today's world, more and more executives are beginning to understand the value of emotions and realize that emotions are one of the most important administrative tools that simplifies and accelerates the way to success. It is because the economy of the 21st century is characterized by the extension of the service sector, an increase in the number of types of services provided, customer-centric marketing, information technology, as well as the widespread adoption of new kinds of human resources management. Of course, such changes influence the requirements for the profession of a manager, namely, the area of responsibility is expanding, mainly in terms of the need to communicate with more and more people. These phenomena cause emotions that need to be given legal status in the workplace, one must learn to listen to and correctly understand feelings, control their own emotions, and then managers can better understand themselves and others and inspire employees to work effectively.

Dariia Doroshkevych

Professor, National Technical University of Ukraine, dariya.dor@gmail.com
Orcid: 0000-0003-0421-0630

Olha Ilyash

Professor, WSG University of Economy, International University of Finance, National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute" Orcid: 0000-0002-7882-3942, olha.ilyash@byd.pl

Article Type / Makale Türü

Research Article / Araştırma Makalesi

Anahtar Kelimeler

Duygusal zeka, sivil toplum örgütü, hall's testi, eq

Keywords

Emotional intelligence, non-government organization, hall's test, eq

Information

This article was presented as a paper at the International Scientific Research Congress held in Gümüşhane on 03-05 December.

Submitted: 10 / 12 / 2020

Accepted: 30 / 12 / 2020

All this contributes to an increase of the requirements for the competence of a manager, and especially with regard to their social and emotional intelligence.

1. Literature Review

The concept of social intelligence was first used by Thorndike (1904). The author characterized it as vision in the interpersonal relations and the ability to act wisely in human relationships. According to the modern scientist Goleman (2002), social intelligence is the ability to understand one's own feelings and feelings of other people, have self-motivation, be able to control emotions in relation to oneself and others. If a person does not notice their own feelings, one can be sure that this person will not notice feelings of others. Communicative competence is a significant part of social competence, because it is responsible for the efficient and successful interaction between people. Social competence is a quality that is responsible for the manager's ability to build and maintain an optimal relationship with all members of their professional activities. It is social competence that forms the system of knowledge about social responsibility and oneself.

Not only social intelligence, but also emotional intelligence affects success and effectiveness of the interaction of social skills, scenarios of behaviour in typical situations, the level of adaptation to conditions, etc. According to the opinion of Mayer et al (2004, p. 197) emotional intelligence "includes the abilities to accurately perceive emotions, to access and generate emotions so as to assist thought, to understand emotions and emotional knowledge, and to reflectively regulate emotions so as to promote emotional and intellectual growth". At the same time, scientists Law et al (2004) reckon that emotional intelligence is conceptually distinct from personality and it has incremental predictive power on life satisfaction.

According to Mayer et al., emotional intelligence includes four parts:

- 1) Ability to perceive and feel emotions (both your own, and emotions of others)
- 2) Ability to direct your emotions to help your brain
- 3) Ability to understand what one or another emotion expresses
- 4) Ability to manage emotions

It is noted that an important thing for understanding emotional intelligence is that it is not the opposite of intelligence, but it is the combination of mind, knowledge and feelings.

After analysing the work of scientists, it becomes clear that emotional intelligence is primarily the ability of a person to understand their feelings and emotions, and besides, it is the ability to act in accordance with their feelings and desires, understand the manifestations of personality in emotions and manage the emotional area on the basis of intellectual analysis and synthesis.

In addition, we understand that emotional intelligence is not only possible to develop but also it needs to be developed because the manager's profession is located in a social context, since people are the main subjects and objects of the manager's influence.

Emotions management and the ability to manage them is a topical issue today. Sometimes, emotions play a decisive role in interpersonal relationships and in making important decisions. Therefore, the ability to understand, perceive and regulate both your emotions and the emotions of others is the key to forming a leader who can effectively manage a company and change its activities.

In the 21st century, the concept of emotional intelligence as an alternative to traditional intelligence spreads rapidly. Thus, Goleman believes that the coefficient of emotional intelligence (EQ) of a director is of greater value for forecasting company's activities than more popular IQ coefficient. And if EQ determines the success rate by 80%, then IQ is able to do it only by 15%.

Nevertheless, all scientists agree that a director dictates the emotional state of the entire team. And if a traditional leader is a strategist who is able to draw up a precise plan for achieving results and implement it, then a modern strategist with a high level of EQ inspires people with their energy, gives the desired emotional impetus for the entire company, and manages the emotions of the group members, especially with regard to feelings related to frustration and optimism (Humphrey, 2002). A leader who correctly manages their inner world and corporate spirit of a company can succeed in business. To be a leader means to be emotionally stronger, tougher, emotionally more attentive and more focused.

Emotional leaders differ not only in professional skills and insight, but also in the ability to connect with people: to inspire, awaken excitement, maintain high motivation and dedication.

Thus, a leader is a member of a group who is nominated for the role of a director with the purpose of organizing mutual, collective activities of people for the rapid and successful achievement of the common goal. Often leader and director are not identical concepts. If a leader carries out regulation of interpersonal relations in a group, then a director organizes the official relations of some group as a social organization. A leader is chosen spontaneously and intuitively, but a director is appointed or elected. However, both phenomena - leadership as well as direction - realize the processes of a social influence in a team. Leadership is able to become direction, and direction can become leaders, cultivating the appropriate qualities in themselves.

For a better understanding of all possible areas of emotional intelligence, there is a model of emotional-social intelligence (Bar-On, 1988). With the help of it, you can understand the role of emotions in leadership and change process.

The study of the level of emotional intelligence development and its features of psychologists, who were undergoing training, was carried out using the standardized method to evaluate emotional intelligence that is Hall Test (2007). The scientist proposed a methodology in order to identify the basic capabilities for understanding the relationships of a personality that can be represented in the emotional sphere, as well as the ability to manage emotions on the basis of decision-making. This technique consists of 5 scales and 30 statements. Let us consider the scales, which are as follows:

- Scale of emotional awareness
- Scale of managing your emotions (emotional forgiveness, emotional non-rigidity)
- Scale of self-motivation (the ability to independently manage your emotional state)
- Scale of empathy
- Scale of recognizing emotions of other people (the ability to influence the emotional state of others)

Each statement presupposes a response on a 6-point scale: from -3, which means "completely disagree" to +3, which means "I completely agree." The disadvantage of this technique is the lack of any information on the psychometrics of the questionnaire. Nevertheless, the technique is one of the most used in the world for measuring emotional intelligence. That is why for the practical part of this article we have chosen Hall's method to evaluate emotional intelligence of employees.

2. Research

To analyse the role of emotions in leadership and change process, the public organization "100 percent of life" was chosen. The organization was created to provide comprehensive support and assistance to people and families affected by HIV / AIDS. One of the most important tasks of the Centre was to stimulate social adaptation, activities, implementation of the rights and opportunities of HIV-positive people, and their close circle. The main objectives of the organization are:

- assist with local, regional, national and international programs aimed at improving the socio-economic situation of people living with HIV / AIDS and other infectious and non-infectious diseases;
- represent the interests of people living with HIV / AIDS and other infectious and non-infectious diseases at all levels of state and public life;
- promote the protection of social, personal and other rights and legitimate interests of people living with HIV / AIDS and other infectious and non-infectious diseases
- assist in the development of science and education, implement scientific and educational programs, provide assistance to scientists in the areas related to prevention, treatment and rehabilitation of patients with HIV / AIDS and other infectious and non-infectious diseases;
- provide assistance to the development of information infrastructure, publishing and mass media aimed at informing the public about the problem of diseases and prevention of HIV / AIDS, alcoholism and drug addiction;

- promote health care development, popularize healthy lifestyle, participate in providing medical care to people living with HIV / AIDS and other communicable and non-communicable diseases, provide social care for such people, give social support;
- promote the development of a tolerant attitude towards people living with HIV / AIDS and other infectious and non-infectious diseases in society, and raise awareness of the society of equal rights of all citizens, regardless of the presence of certain diseases.

A public organization for analysis was chosen not by chance. The fact is that emotional leadership is extremely important when working firstly, in a public organization, and secondly, when working with HIV / AIDS positive people.

It is worth starting an organization's analysis with analysing the number of employees in the company. According to the staff schedule CO "100 percent of life. Kyiv region", in 2019, one approved personnel comprising 32 staffing positions, of which 30 people work as consultants and directly perform the functions of communicating with HIV / AIDS positive people. The other two people are the top manager of the organization and the accountant.

We can calculate the coefficient of personnel turnover, which will enable us to analyse labour movement in 2017-2019. The coefficient of personnel turnover is calculated in the following way: the number of dismissed employees should be divided by the average number of registered personnel for the corresponding period. If the coefficient is less than 0.1 – staff turnover in an organization is low; from 0,1 to 0,2 - personnel turnover in an organization is average; the coefficient is more than 0,2 - staff turnover in an organization is high. The data on personnel turnover are presented in Figure 1. It is clear from the calculation that the personnel turnover in 2019 was at a high level, although, the year before, one could observe the average staff turnover.

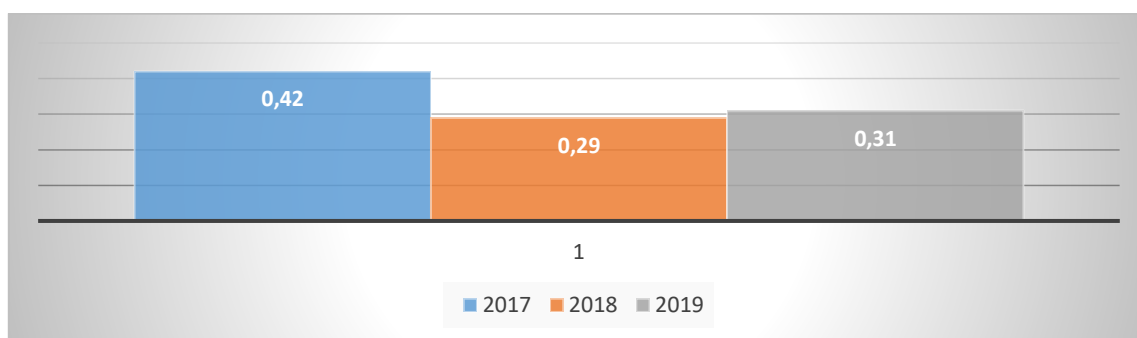


Figure 1. Coefficient of personnel turnover in NGO "100 percent of life"

Of course, a number of reasons for the high staff turnover is associated with dissatisfaction with payment, leadership and other reasons. However, there are a number of reasons that are on the emotional level, namely:

- emotional weakness and instability when working with HIV / AIDS people
- lack of stress resistance
- inability to show firmness at the same time with respect for the wishes of HIV / AIDS positive people
- inability to understand the feelings of people, the absence of sympathy
- low level of morality
- lack of skills to build a personalized relationship with a HIV / AIDS positive person, establish emotional intimacy
- absence of flexibility, confidence in their own, the only true point of view
- inability to control their impulsiveness, especially when working with recovering HIV / AIDS positive addicts.

For a better understanding of the situation in the organization and keeping in mind the work of Goleman (2011) that EQ of women is higher than men's EQ, a gender analysis was conducted. The results are presented in Figure 2. The diagram shows that for 3 years the number of men has been significantly lower than the number of women.

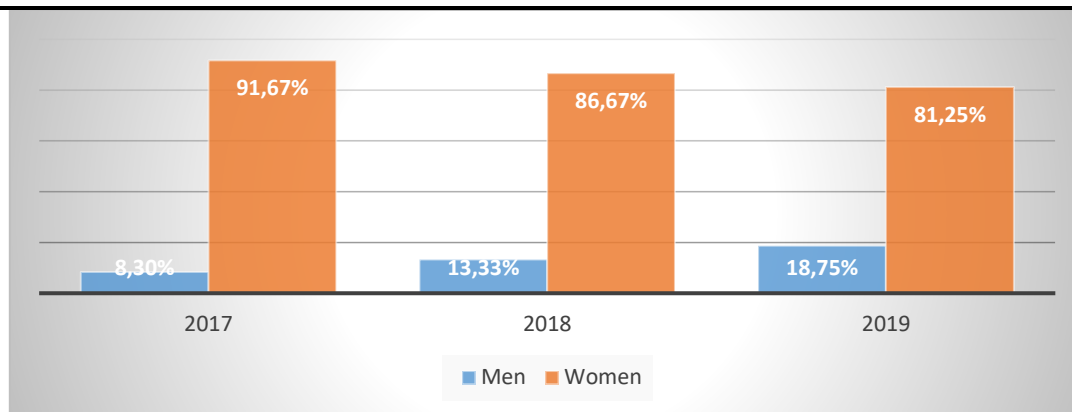


Figure 2. Percentage of men and women in NGO "100 percent of life"

In addition, for the effective work of the organization, successful motivation of its staff is of great importance. Salary has always been one of the main aspects that form the motivational mechanism of labour activity and ensure the effectiveness of the system of material incentives. In the organization "100 per cent of life" the hourly system of remuneration of managerial staff is applied. To determine how powerful the influence of motivational indicators on employees of the organization is, we have defined average values of the estimated indicators on the basis of the conducted survey, the results of which are given in Table 1.

The analysis of labour satisfaction of staff according to the main components of the motivational profile shows that material satisfaction of staff is low, career and professional one is at the average level. However, for this article we are interested in the last indicator that is moral satisfaction. Figures indicate that moral satisfaction is low, as evidenced by the fact that emotions have an impact on leadership, which in its turn affects staff turnover.

Table 1. Estimation of labour satisfaction of the personnel of the organization "100 per cent of life" by the components of the motivational profile

	Estimation of labour satisfaction of personnel by the components of the motivational profile, %			
	Material	Career	Professional	Moral
Managers	15,6	18,8	17,9	16,7
Consultants	8,1	14,9	13,8	14,9

Loyalty of personnel occurs when common goals and interests of organizations do not fade into insignificance when they turn a group of people into an organization, team, when the emotional factor is not only wages but also moral satisfaction of staff from the work process, emotional stability and desire to understand others. If we consider loyalty from the point of view of organization management, the essence of activity with its formation is to encourage employees to share the company's values, to put its interests above their own and stay in a company even if for them it is not profitable. All these phenomena are largely observed when the level of EQ is high, provided when a leader manages not only operational work, but also the psychological state of their colleagues.

The organization faces the task of maintaining and retaining at work professionals, leaders with high EQ, who are able to control not only their emotions and emotions of their colleagues, but also help to control the emotions of HIV/AIDS positive people. This can be achieved by regularly evaluating staff using Hall's method. In the organization "100 percent of life", the performance review of workers is carried out once a year. Performance appraisal is a process of assessing how efficiently an employee of the organization performs official duties; it is conducted by the management of the organization. As part of the standard appraisal procedure, the testing by Hall's method was added.

All employees of the public organization were tested by Hall's method. The following key was used to decipher the test (Table 2), the ordinal number of questions is presented in Appendix A.

Table 2. Key to Hall's test

Scales	Questions
Emotional awareness	1, 2, 4, 17, 19, 25
Managing your emotions	3, 7, 8, 10, 18, 30
Self-motivation	5, 6, 13, 14, 16, 22
Empathy	9, 11, 20, 21, 23, 28
Recognizing emotions of other people	12, 15, 24, 26, 27, 29

According to the results, emotional intelligence on a certain scale is considered high if the result is 14 or more points, the result 8-13 points shows the average indicator, and 7 points and less suggests low EQ. The integrative (the sum of all scales) level of emotional intelligence taking into account the dominant sign is determined by the following quantitative indicators: 70 and more - high level, 40-69 - average, 39 and less - low.

According to the results:

- 11 people out of 32 have a high level of emotional awareness
- 10 people out of 32 can effectively manage their emotions
- 10 people out of 32 are capable of a high level of self-motivation
- 9 people out of 32 are capable of high levels of empathy
- 11 people out of 32 have a high level of recognition of other people's emotions
- 8 people out of 32 have a high level of integrative emotional intelligence
- 6 people out of 32 have a low level of emotional awareness
- 3 people out of 32 cannot manage their emotions
- 6 people out of 32 are not capable of self-motivation
- 6 people out of 32 are not capable of empathy
- 4 people out of 32 people have a low level of recognition of other people's emotions
- 8 people out of 32 have a low level of integrative emotional intelligence

Apart from understanding, which indicators are the lowest, it is advisable to know in which proportion EQ is expressed on different scales for all employees of the public organization (Figure 3). Obviously, the largest number of people are at the average level of EQ by all indicators. However, an interesting thing is that a high level of emotional awareness is typical of almost twice as many workers than a low level. An even greater difference is seen by the indicator "managing their emotions", where the difference is 3 times more.

This is a very interesting fact, because it means that employees of the organization are mostly capable of self-control and self-awareness. Another fascinating moment is almost 3-fold difference between the numbers of people with high and low levels of emotional recognition. One-third of people recognize the emotions of HIV / AIDS positive people very well, half of them do it pretty well, and the rest of people show poor results.

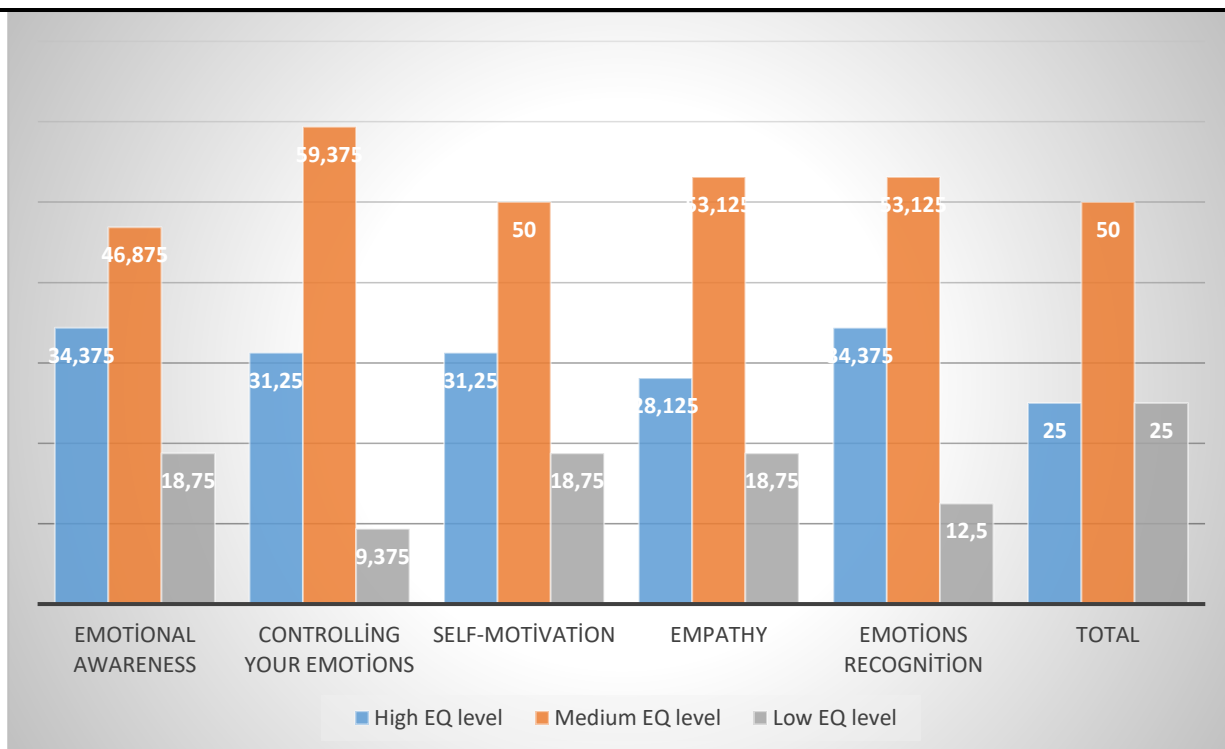


Figure 3. The results of EQ testing with Hall's Test in NGO "100 percent of life"

In order to understand the average level by each scale, a summary Figure 4 was compiled. The presented information makes it clear that the most developed is the scale of managing own emotions, and the lowest results are on the level of empathy. The difference between the indicators is low, but its presence suggests that consultants can put up barriers between themselves and HIV / AIDS positive people and not perceive their emotions. This is confirmed by the conclusions of Figure 3.

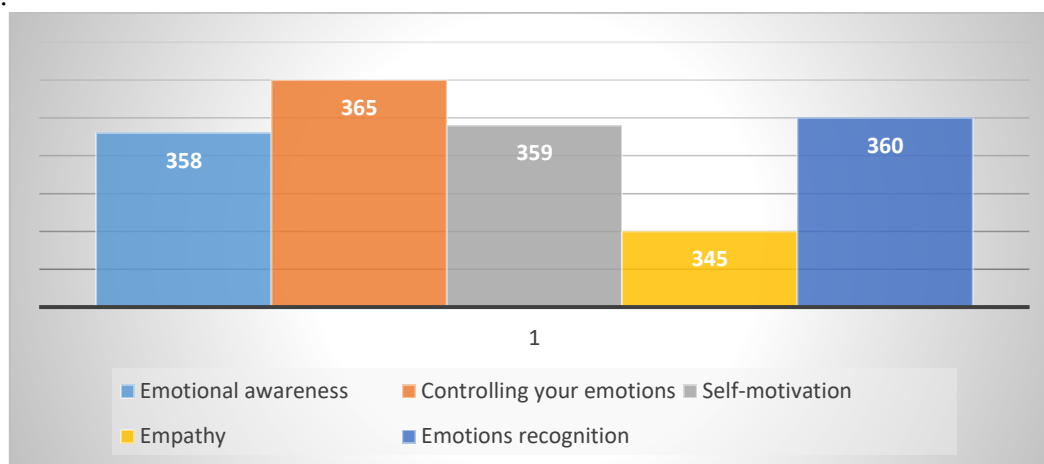


Figure 4. Average results of EQ testing with Hall's Test in NGO "100 percent of life"

According to the test, the head of the organization "100 percent of life" has a high level of EQ. The top manager has been in charge of her current activities for 5 years; she hires and dismisses people. By all the scales, besides self-motivation, she has high rates of EQ. One can say that the head of the organization suits the profile of a modern leader.

Let us consider the level of EQ, depending on the gender of a person (Figure 5).

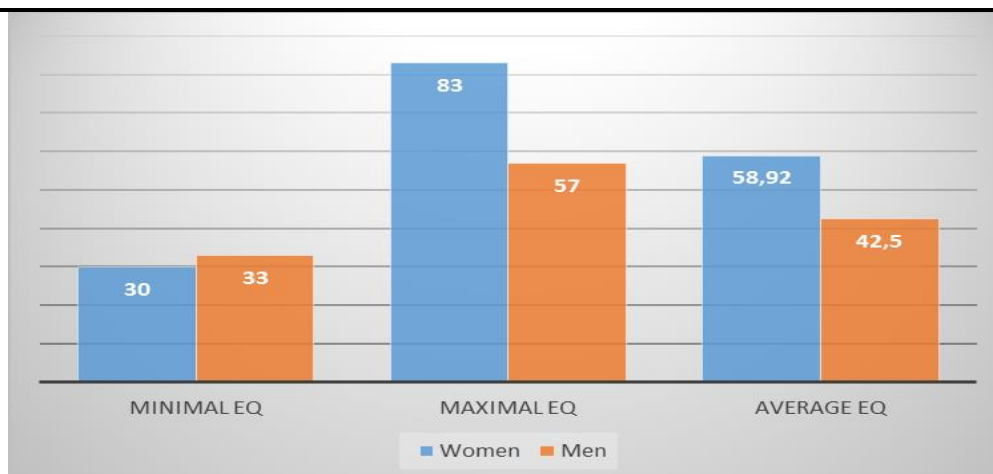


Figure 5. The calculation of EQ level depending on the gender

The results as exemplified by this public organization show that really there is a difference between EQ of men and women. If a female worker has the lowest threshold in this case, then the highest and middle levels of EQ are still with women. Moreover, the difference in the average indicator is marked by a large distinction by 16 units.

The next step is to identify the leaders of the organization, who are characterized by a high level of EQ. At this stage, it is essential to understand that not only must we distinguish the leaders, but also keep them at work, motivate them to continue working and improve performance.

It is known that 8 people, including the top manager, have a high level of integrative emotional intelligence. However, 4 out of six people - consultants 2, 8, 10, and 24 - have EQ at the level of 78-83. All of these consultants are women and they are the most valuable leaders of the organization.

A survey was conducted to understand who, in employees' opinion, were considered to be their leaders. Each employee had to give each colleague an assessment on a 10-point scale by answering the question: "Do you think that your colleague is able to control their emotions, is able to influence the emotions of others, feels the emotions of their colleagues and HIV/AIDS positive people, and is a leader whose opinion other colleagues are listening to?" 1 point means a negative answer to the question, 10 points means a positive one. According to these data, the organization's personnel consider the following employees to be leaders: the top manager and consultant 2 (10 points), consultants 8, 10, 15, 24 and 25 (9 points). Therefore, the results of Hall's testing are largely the same as the opinions of employees.

Conclusions and Recommendations

The conclusions of this study on the organization "100 percent of life" were handed in to the management. On their basis, it was decided to change the approach to consultants and introduce two significant changes:

1. Establish training of staff to improve their EQ
2. Flexibility and a motivation system

The training and development of the company's staff is now one of the strategic tasks in terms of developing emotional potential. In the organization, there are the following types of staff training:

- Training of employees who have been hired;
- Training of workers in the workplace

The consultant 2, whose EQ is at the highest level in the company has overtaken the organization of training. The consultant supported this idea and with pleasure began to perform the functions assigned to him. Certain teachers were involved in the training: mainly psychologists and doctors. The latter deal more with teaching the medical aspects of treatment of HIV / AIDS positive people and debunking myths and assumptions, which are often embedded in the minds of consultants and can affect their emotional state. People, who are studying, undergo Hall's test twice: at the beginning and at the end of the training. Through this testing, changes in the employees' EQ level are

monitored. If the changes are negative or do not occur at all, the information is communicated to the top manager of the organization and then she decides whether to fire an employee, or to continue making efforts to develop EQ.

There are three main areas where EQ training and development are conducted.

1) Recognition of emotionality. Emotions are the reaction of a living organism to what is happening. They are always manifested in a person, in all spheres of their activity. If one does not admit it, if one suppresses and ignores emotions, they will unnoticeably change the behaviour of a person. For example, an employee wants to answer in a calm manner, but against their will, they can respond sharply.

2) Work with emotions. Daily work with emotions gives you better control over what has been suppressed by that time. Different exercises give you the opportunity to control yourself in any situation. Over time, a person notices that they find more correct words for a particular situation, become more flexible, and that the speed of reactions and thinking increases.

3) Recognizing the emotions of other people and at the same time recognizing your own emotions. Simultaneously with noticing your emotions you need to train the ability to track the emotions of other people. It is possible to assume what others feel, by their non-verbal signs - movements, gestures, facial expressions, voice. Involved psychologists can teach all this. That consultant, who has learnt to deal with both tasks simultaneously, will be able to achieve their goals with fewer attempts. In addition, he or she will increase the people's understanding of that, which he or she wants to convey to them.

Emotional intelligence can and should be managed, it should be trained daily, and it can track your own emotions and emotions of others.

The second change in the organization was the introduction of a flexible work schedule, which allows every consultant to choose the time when it will be convenient for them to work. As to motivation, now the calculation of the amount of bonus includes two additional indicators: the success of receiving training (it is presupposed that each consultant will be trained once a year) and the level of emotional leadership.

The presented case study has positively influenced the organization's activities. Now, consultants start to realize that emotions and their manifestation are the path to development, improvement and change, and not to negative consequences. Communicating with HIV / AIDS positive people has improved, more people begin to open their heart and discuss their problems with consultants.

In the future, the organization has decided to continue working with EQ and develop leadership.

References

- Russell, B. (1966) *Selling : A Behavioral Science Approach*. Joseph Wilmer Thompson, p. 197
- Thorndike, E. L. (1904). *Library of psychology and scientific methods. Theory of mental and social measurements* [online]. The Science Press. Available at: <http://dx.doi.org/10.1037/13283-000>
- Mayer, J. D., Salovey, P., Caruso, D. R. (2004). Emotional intelligence: Theory, findings, and implications. *Psychological Inquiry*, 60, 197-215.
- Law, K. S., Wong, C.-S., & Song, L. J. (2004). The Construct and Criterion Validity of Emotional Intelligence and Its Potential Utility for Management Studies. *Journal of Applied Psychology*, 89(3), p.483-496.
- Humphrey, R. (2002). The many faces of emotional leadership. *The Leadership Quarterly*. Volume 13, Issue 5, October 2002, p. 493-504
- Bar-On, R. (2006). The Bar-On model of emotional-social intelligence (ESI). *Psicothema*, 18 , p. 13-25.
- Hall, N. (2007). *Positive Psychology and Emotional Intelligence*. Positive Psychology News Daily, NY (Editor S.M.) - November 10, 2007
- Goleman, D. (2011). Are Women More Emotionally Intelligent Than Men? [online] Posted Apr 29, 2011. Available at: <https://www.psychologytoday.com/us/blog/the-brain-and-emotional-intelligence/201104/are-women-more-emotionally-intelligent-men>
-

Post-Covid Tourism, A Consensual Re-Reading of the Economic Outlook Application of the Delphi Method to "Morocco" Destination

Abstract

The unprecedented health crisis of COVID-19 has deeply affected the tourism industry around the world. As a direct consequence, more than three billion potential tourists have been confined (Donthu & Gustafsson, 2020) and the other actors (hosting companies, restaurateurs, transporters, etc.) are looking to understand the future of this tourist demand and its effects on their tourist destination. They are currently searching for answers to situate themselves between the multitude of potential possibilities and the uncertain and changing perspectives.

Indeed, between adaptation and resilience, it is evident that there is a latent demand for tourism stays, ready to manifest after these long periods of confinement. However, the behavior of this tourist demand remains complex and highly dependent on the health conditions imposed by the pandemic, on the freedom of travel and on the perception of health risks by the key actors of tourist destinations.

In this context, a literature review allows to define three key scenarios for tomorrow's tourism, namely the growth of local tourism or 'domestic tourism' (Blanc, 2020; Donthu & Gustafsson, 2020; Zenker & Kock, 2020), the emergence of a 'Stop and Go' tourism that can adapt continuously to pandemic situation evolution (Jiricka-Pürner et al., 2020; Uğur & Akbıy, 2020). Finally, the development of tourism internalizing the health risk.

Therefore, the definition of a Moroccan tourism scenario needs a depth review of the current situation and a re-reading of the "wait and see" outlook for the onset of the health crisis. Since the pandemic appears, behaviors of the tourism stakeholders is already evolving in the short and medium run. Consequently, the re-reading of outlook must be a consensual process entrusted to tourism experts.

To this end, we have suggested the use of the Delphi process. This technique aims to ensure a convergence of opinions on forward-looking issues, such as demand for sustainable tourism (Choi & Sirakaya, 2006) and predictions on tourist destination attractiveness (Lee & Hsieh, 2016; Miller, 2001; Torres-Delgado & Palomeque, 2014). Thus, the Delphi survey takes place in a variety of rounds, taking into account the opinions convergence of confirmed tourism expert's panel, namely provincial tourism delegates, members of tourism associations, specialists in sustainable tourism, researchers in tourism, etc.

Thus, Delphi survey results will make possible to prevail a post-COVID tourism scenario and to forecast the key actors' reactions, facing the evolution of this global pandemic.

Introduction

The health crisis of COVID-19 has heavily affected tourism activities and as a result, tourism demand will inevitably change and adopt behaviors that are difficult to anticipate (Blanc, 2020).

Today, it is strategic to "draw" horizons that can be able to orient the key actors' actions and planning to meet the strong latent demand of Post-COVID. Consequently, understanding the behavior of this tourism demand will allow looking for new ways of visiting destinations and fulfill this need for escape.

Therefore, for a country like Morocco, very dependent on tourism activity, predicting a scenario requires a detailed analysis of the current situation. In addition, it is important to analyze the "wait

Fouad Kamar

PhD student at Mohamed V university, Morocco, fouad.kamar@um5s.net.ma, ORCID ID: 0000-0002-6364-5872

Abdelmajid Charrass

PhD in economics from Mohamed V university, Morocco, abdelmajid.charrass@um5s.net.ma, ORCID ID: 0000-0001-7668-007

Salwa Bahyaoui

Professor at Mohamed V university, Morocco, s.bahyaoui@um5s.net.ma, ORCID ID: 0000-0001-6794-0070

Article Type / Makale Türü

Research Article / Araştırma Makalesi

Anahtar Kelimeler

Turizm, COVID, Delphi Metodu

Keywords

Tourism, COVID, Delphi Method

Information

This article was presented as a paper at the International Scientific Research Congress held in Gümüşhane on 03-05 December.

Submitted: 10 / 12 / 2020

Accepted: 31 / 12 / 2020

and see" outlook for the onset of the health crisis, because the pandemic appears to be taking place in the short and medium term and the conduct of the tourism stakeholders is already changing. Consequently, the re-reading of viewpoints must be a consensual process, entrusted to tourism experts.

To this end, this paper suggests to use the Delphi method to ensure a convergence of opinions on a scenario forecasting the future of tourism demand, during and after the health crisis of COVID-19, and to prevail one scenario among those identified in the literature review.

1. Literature Review

The recent literature review on COVID-19 tourism impacts allows to define three key scenarios for tomorrow's tourism, namely the growth of local tourism or 'domestic tourism' (Blanc, 2020; Donthu & Gustafsson, 2020; Zenker & Kock, 2020), the emergence of a 'Stop and Go' tourism that can adapt continuously to pandemic situation evolution (Jiricka-Pürerer et al., 2020; Uğur & Akbıyık, 2020). Finally, the scenario is to predict the development of tourism internalizing the health risk.

1.1. Scenario n°1: "Rise of a Domestic Tourism"

This crisis seems to be projected over the medium run; Moreover, some countries remain closed for the long run. The dynamism of domestic tourism under health control remains the only possible solution to save the tourism sector.

The need to escape is pressing for many tourists, but health constraints dictate the ways of visiting a destination. This need cannot be "oppressed" for a long time, but it will be satisfied by alternatives of proximity visits and small pleasure of escape close of visitor's home.

This local or domestic tourism offers adapted packages, based mainly on bars and restaurants, sports, cultural and leisure activities (day and night) (Blanc, 2020).

The health crisis also shows the capacity of soft forms of tourism to absorb tourist demand abroad. For example, rural tourism is renewing itself by integrating new sanitary requirements, and standards of comfort.

Thus, we are going to witness a new situation in the tourist geography that is being recomposed again, with the emergence of rural destinations, mountains and valleys, far from the crowds. However, these territories, such as natural parks, do not have sufficient reception capacities to meet the sharply increasing demand.

1.2. Scenario n°2: "Stop and GO" Tourism

In this very volatile health crisis, tourism demand is able to adapt systematically and continuously to the epidemic evolution (Blanc, 2020; Duarte Alonso et al., 2020; Kock et al., 2020).

In this sense, an increase in infected cases in a tourism destination and the tightening of health measures lead to the postponement of tourist demand. On the contrary, controlling the epidemic in another destinations and reducing health restrictions measures will stimulate tourism demand.

Therefore, this scenario, called "Stop and GO" envisages an adaptable behavior of tourist demand following the disease situation evolution. However, this scenario is more focused on the short and medium run (Zenker & Kock, 2020).

1.3. Scenario n°3: "Development of Tourism Internalizing the Health Risk"

The coronavirus pandemic COVID-19 is above all, a humanitarian crisis that has consequences for people's lives. Confinement and fear of contamination generate a psychological pressure on the consumer, which only escape can satisfy (Engag et al., 2020).

Today, it is obvious that no economic or health crisis can stop tourist activity forever. In the extreme case, the development of macabre tourism (or obscure tourism) testifies how tourism can deal with the fear of tourists and tame it.

Thus, the COVID-19 epidemic could alter the behavior of tourism demand in a way that risks will be an intrinsic part of the tourism experience.

In addition, several types of tourism meet unavoidable needs, for example, business tourism, very strongly affected by the health crisis, seems to be incompressible because it meets economic needs more than leisure.

2. Method

To forecast one scenario over another or to describe a mixture between them, we suggested the use of the Delphi method. The goal of this technique is to ensure a convergence of opinions on forward-looking issues, such as demand for sustainable tourism (Choi & Sirakaya, 2006) and predictions on tourist destination (Lee & Hsieh, 2016; Miller, 2001; Torres-Delgado & Palomeque, 2014).

Thus, the Delphi survey takes place in a variety of rounds, taking into account the convergence opinions of a confirmed tourism expert panel, namely provincial tourism delegates, representatives of tourism organizations, experts in sustainable tourism, researchers in tourism, etc.

Several tourism studies have used the Delphi method to create sustainable tourism metrics, to design a tourism offer or to make tourism demand forecasts. The following table provides examples of the Delphi method applications in the tourism field.

Table 1. Examples of the Delphi Method application on Tourism

Authors	Main objective	Study zone
(Thanh, 2014)	Forecast tourism demand	Vietnam
(Arandis-I-Agramunt, 2019)	Design of a tourism resource	Spain
(Miller, 2001)	Construction of sustainable tourism indicators	United Kingdom
(Choi & Sirakaya, 2006)	Construction of sustainable tourism indicators	Canada
(Lee & Hsieh, 2016)	Construction of sustainable tourism indicators	Taiwan
(Torres-Delgado & Palomeque, 2014)	Construction of sustainable tourism indicators	Catalonia (Spain)

Source: by authors

At the practical level, the Delphi survey takes place in several steps, first of all, it is necessary to define the survey problem, to select experts and secondly, to develop a questionnaire and its administration.

2.1. Delphi Survey Research Problem

Foremost, each survey must define its research problem. In our case, it consists in prevailing a scenario of tourism development after and during the COVID-19 health crisis.

Moreover, this research problem and its objective must be clearly communicated to the chosen experts in order to avoid any ambiguity and to be able to orient the reflection on to the main subject study (Questionnaire cover letter and preamble).

2.2. Selection of Delphi Survey Experts

The selection of experts is the most sensitive step in the Delphi method. It is questionable because of the subjectivity that can be introduced when choosing experts and their qualification. To this end, we referred to several studies in order to circumvent the qualifying conditions of an expert (Choi & Sirakaya, 2006; Torres-Delgado & Palomeque, 2014).

Therefore, an expert can be considered as a "person whose profession is to assess the value of something" (Miller, 2001, p. 3). This definition emerges from the two criteria retained for the selection of experts. First, to have a permanent and habitual contact with the subject studied, by profession or interest, and secondly, to have the proven ability to assess the value of the object studied, justified by scientific publications for academics or the exercise of decision-making or consultation power for others.

Moreover, the experts must remain anonymous in order to neutralize mutual influences and to guarantee the results' reliability. Several researchers propose this condition, in order to avoid a conformism consensus among experts (Choi & Sirakaya, 2006; Torres-Delgado & Palomeque, 2014).

To this end, at the start, we contacted 22 experts, but only 19 expressed interest in participating in the survey. This number is close to 18 recommended for carrying out a Delphi survey (Arandis-I-Agramunt, 2019; Miller, 2001). Moreover, Delphi method it is different to an opinion survey that

depends on the sampling rules; but the findings validity depends exclusively on the knowledge, skill and intentional cooperation of the consulted experts.

2.3. Questionnaire Administration and Consensus Validation

The Delphi survey takes place in two steps, called "rounds" which help to achieve a consensus on the fundamental aspects of the Post-Covid tourism scenario. To do so, we have conducted the questionnaire by email or face to face, depending on the availability of the interviewed expert.

Therefore, we have carried out an initial survey of all the experts selected for this report. Once this first step has been completed, we have again administered the same questionnaire to the same experts, but in this time, we have presented the first step findings.

During second panel, experts take an idea about the effects of the other experts' reactions anonymously. In the second step, experts can either retain their answers or decide, otherwise, to settle on a consensus opinion. In addition, in order to evaluate the consensus degree of this process, we plan to adopt the Isaak (1996) and Zenou (2004) methods.

Therefore, the consensus validation relies mainly on concordance and convergence parameters. For this purpose, the Kendall criterion makes it possible to calculate the results consensus degree of the panel, from the threshold of confidence. It allows calculating the concordance of the experts' answers during a round.

In addition, the Wilcoxon test (Schmidt, 1997) allows the integration of responses between the two panels to infer if there is a consensus on the under investigation phenomenon.

2.4. Validation of the expert opinions concordance

Thus, in the light of the obtained results, we observed an improvement in the Kendall index "w" which becomes closer to a strong consensus ($W = 0.7$), which shows the experts convergence around proposed items. The table below shows the results of the Kendall concordance test during the two survey phases.

Table 2. Results of the Kendall Concordance Test

Kendall concordance test	Round 1	Round 2
N	19	19
Kendall W	0,565	0,691
chi-square	688,266	907,965
Asymptotic value	0,000	0,000

Source: Authors calculation, by SPSS (v25)

In addition, the improvement of Kendal index, from one round to another, shows that the answers converge towards a consensus among the experts. Therefore, we decided to obtain a consensus around the fundamental aspects of Post-COVID tourism.

2.5. Validation of Expert Convergence

Moreover, to validate the consensus between experts, Schmidt (1997) also proposes to carry out a non-parametric statistical test to measure the responses' distribution about items, during the two phases. This is the Wilcoxon test (signed ranks) to measure the convergence degree between the two panels during the two rounds.

This method consists in testing two hypotheses:

- H0: Distribution of Mean Absolute Deviation (MAD) is similar between the two panels.
- H1: Distribution of MAD in the second round is lower than the first round ($MAD2 < MAD1$; convergence of responses).

For this purpose, if H1 is significantly validated with a high degree of confidence (asymptotic significance = 0.000 < 1%). Thus, the answers converge between the two rounds of the survey. The table below shows the Wilcoxon test finding, during the two rounds of the survey.

Table 3. Wilcoxon Test Results

Rangs	N	Average rank	Sum of ranks	
MAD_ROUND2 - MAD_ROUND1	Negative ranks	6a	4.7	66,00
	Positive ranks	9b	8.3	30,00
	Ex aequo	0c		
	Total	15		
a. MAD_ROUND2 < MAD_ROUND1				
b. MAD_ROUND2 > MAD_ROUND1				
c. MAD_ROUND2 = MAD_ROUND1				
Statistical tests		MAD_ROUND2 - MAD_ROUND1		
Z		-5,452b		
Sig. asymptotic (bilateral)		0,000		
a. Wilcoxon ranking test; b. Based on positive ranks.				

Source: Calculated by the authors, using SPSS (V25)

To this end, we have obtained a convergence of opinions on nine aspects of the scenarios and a rejection of six non-consensual aspects. The elements comprising the most common scenario are presented below.

2.6. Determination of the consensual scenario.

Thus, after having demonstrated the responses' convergence between the experts in the two rounds, and in the light of the results obtained, we proceeded to the selection of the post-Covid tourism aspects.

Table 4. Consensus on a Post-COVID Tourism Scenario (Based on Delphi Method Results)

	Scenario Component	(MAD2-MAD1)
1	COVID epidemic affects tourism demand behaviors	-0,5250
2	Tourists adapt to health requirements and travel anyway.	-0,1500
3	Tourists from international destinations choose to visit local destinations	-0,2083
4	Domestic tourism offers the best outlook for a revival of the tourism sector.	-0,5233
5	As a precaution, post-COVID tourism will be a local tourism	0,0017
6	Rural and isolated destinations and natural spaces could attract visitors previously interested in foreign destinations.	-0,3750
7	Evolution of tourism demand is dependent on the epidemic evolution in the medium run.	-0,2083
8	Evolution of tourism demand is dependent on the epidemic evolution in the long run.	0,2083
9	Tourist activity will resume its rhythm and will stand out from the epidemic evolution.	0,2500
10	In the long term, considering the health circumstances, tourism will resume its development.	0,2917
11	Post-COVID tourism will experience an unprecedented revival.	0,8548
12	Post-COVID tourism will evolve at a slow pace.	0,5214
13	Post-COVID tourism will cancel part of the initial demand	0,3256
14	Post-COVID tourism will accumulate part of the initial latent demand	0,4251
15	tourism demand will not change behaviors on Post COVID period	0.6123

Source: Calculated by the authors, using SPSS (V25)

According to previous results, experts are convergent on the COVID epidemic effects on tourism demand behaviors; they confirm that it depends on the epidemic evolution in the medium run. In the same logic, recent literature confirms that tourism will grow in line with the disease situation; during and after the COVID crisis (Blanc, 2020).

Thus, the findings of the Delphi study are dominated by the medium-term "Stop and Go" scenario. In this context, the growth of tourism would be a mixture of release periods, followed by restricting periods.

However, in the long run, tourists will be able to adapt themselves to the health requirements, and they will travel anyway, despite the epidemic situation. This forecast is in line with the third scenario that foresees the resumption of tourist activity in all circumstances.

Moreover, in the short term, tourism converts to domestic and local tourism. In this logic, the experts agree that tourists from international destinations choose to visit local destinations. This result supports several observations in the literature that consider domestic tourism offers such as the best outlook for a revival of the tourism sector (Mishra et al., 2020; Zenker & Kock, 2020).

In this sense, the Delphi method findings confirm the second scenario of domestic tourism in the short run. Thus, rural and isolated destinations and natural spaces could attract visitors previously interested in foreign destinations.

Results and Discussion

Following our Delphi survey process, we performed an initial survey of all the experts selected for the study. When this first survey was carried out, we began the same survey again with the same experts, but we submitted to them the first survey findings.

During this second round, each expert consulted anonymously how the other experts had answered the same questionnaire. As a result, they had a choice between sticking to their answer and deciding to move closer to the general view.

To this end, we carried out two rounds of surveys to reach a consensus on the most relevant aspects of the proposed scenarios. Moreover, data of Delphi study were entered and analyzed, by using SPSS software (version 25.0).

Conclusion

Moroccan tourism is already suffering from the health crisis and the perspectives are more blurred; which increases uncertainty and affects the various stakeholders' actions in a tourist destination. At a time of deconfinement, several questions are asked about the future of tourist demand.

Therefore, it is important to challenge tourism experts on the tourism market future and to give priority to the post-COVID tourism scenario. Thus, we used the DELPHI method, which is very useful in the case of prospective studies that suffer from uncommon literature, such as the unprecedented outbreak of COVID-19.

The results of the expert consultation demonstrate the importance of distinguishing between three demand behaviors, separated along the time axis.

In the short term, the tourism market will be directed towards local tourism; the tourist will take the car instead of the plane and walk instead of the car. In this context, visitors are going to visit the natural parks and the nearby restaurants.

However, the findings confirm the prevalence of the "Stop and GO" scenario over the medium term. In this logic, the visitors' actions would closely follow the disease situation in order to determine whether to escape or stay at home or nearby.

Finally, no strength is able to avoid the urgent need to get away in the long run; the results indicate that tourism Post-Covid, tourism can find new ways of traveling and internalize the health risk.

Ultimately, this paper faces limitations related the forward-looking exercise, on a very volatile and changing topic, such as tourism and the COVID-19 health crisis. Moreover, during the experts'

selection, a part of subjectivity could be introduced. In the end, it is not a question of eliminating subjectivity, but using it wisely to understand our research subject (Drapeau, 2009).

References

- Arnandis-I-Agramunt, R. (2019). What's a tourism resource? A Delphi analysis to the Hispanic academia. *Cuadernos de Turismo*, 43, 553–555. <https://doi.org/10.6018/turismo.43.02>
- Blanc, J.-M. (2020). Sommaire. *Futuribles International*, 1(1), 1–20.
- Choi, H. C., & Sirakaya, E. (2006). Sustainability indicators for managing community tourism. *Tourism Management*, 27(6), 1274–1289. <https://doi.org/10.1016/j.tourman.2005.05.018>
- Duarte Alonso, A., Kok, S. K., Bressan, A., O'Shea, M., Sakellarios, N., Koresis, A., Buitrago Solis, M. A., & Santoni, L. J. (2020). COVID-19, aftermath, impacts, and hospitality firms: An international perspective. *International Journal of Hospitality Management*, 91(June), 102654. <https://doi.org/10.1016/j.ijhm.2020.102654>
- Engag, L. E. S. A., Dans, E. S., Domaine, L. E., Tourisme, D. U., & Au, F. (2020). Les actions engagées dans le domaine du tourisme face au coronavirus (COVID-19). 1–78.
- Kock, F., Nørfelt, A., Josiassen, A., Assaf, A. G., & Tsionas, M. G. (2020). Understanding the COVID-19 tourist psyche: The Evolutionary Tourism Paradigm. *Annals of Tourism Research*, 85(September), 103053. <https://doi.org/10.1016/j.annals.2020.103053>
- Lee, T. H., & Hsieh, H.-P. (2016). Indicators of sustainable tourism: A case study from a Taiwan's wetland. *Ecological Indicators*, 67, 779–787. <https://doi.org/10.1016/j.ecolind.2016.03.023>
- Miller, G. a. (2001). The Development of Indicators for the Promotion of Sustainable Tourism. 22, 351–362. <http://epubs.surrey.ac.uk/theses/133>
- Mishra, N. P., Das, S. S., Yadav, S., Khan, W., Afzal, M., Alarifi, A., Kenawy, E.-R., Ansari, M. T., Hasnain, M. S., & Nayak, A. K. (2020). Global impacts of pre- and post-COVID-19 pandemic: Focus on socio-economic consequences. *Sensors International*, 1(September), 100042. <https://doi.org/10.1016/j.sintl.2020.100042>
- Thanh, V. T. (2014). Prévision de la demande touristique par méthodes Delphi et Box-Jenkins. *Téoros: Revue de Recherche En Tourisme*, 29(1), 100. <https://doi.org/10.7202/1024760ar>
- Torres-Delgado, A., & Palomeque, F. L. (2014). Measuring sustainable tourism at the municipal level. *Annals of Tourism Research*, 49, 122–137. <https://doi.org/10.1016/j.annals.2014.09.003>
- Zenker, S., & Kock, F. (2020). The coronavirus pandemic – A critical discussion of a tourism research agenda. *Tourism Management*, 81(June), 104164. <https://doi.org/10.1016/j.tourman.2020.104164>

Investigation of Digital Retail Consumer Complaints in The Food Industry During COVID-19: Market Chain Example of Turkey

COVID 19 Sürecinde Gıda Sektöründe Dijital Perakende Tüketici Şikayetlerinin İncelenmesi: Türkiye Marketler Zinciri Örneği

Abstract

Today, with the widespread use of the internet, the concept of digital consumer comes to the fore as well as the traditional consumer concept. Many countries and sectors have been adversely affected by the disaster that occurred in Wuhan, China in December 2019 and which the World Health Organization expressed as the epidemic called COVID-19 on January 12, 2020. This situation caused consumers to spend more time and shop in digital environments. For this reason, knowing the e-commerce food retail sector consumer complaints is very important for companies to ensure customer satisfaction. This study aims to examine the customer's complaints of two major grocery chains in the e-commerce retail sector in Turkey by using the content analysis method. In this context, a total of 443 complaints about e-commerce food retail businesses obtained from www.sikayetvar.com between 01 July - 26 August 2020 were resolved according to the issues. As a result of the analysis, it was determined that the majority of the related e-commerce food retail consumer complaints were product and price refunds and delay in product delivery.

Öz

Günümüzde internetin yaygın olarak kullanılmasıyla birlikte geleneksel tüketici kavramının yanı sıra dijital tüketici kavramı da gündeme gelmektedir. Aralık 2019'da Çin'in Wuhan kentinde ortaya çıkan ve Dünya Sağlık Örgütü'nün 12 Ocak 2020'de COVID-19 adlı salgın olarak ifade ettiği felaketten birçok ülke ve sektör olumsuz etkilenmiştir. Bu durum ise tüketicilerin dijital ortamlarda daha fazla zaman geçirmelerine ve alışveriş yapmalarına sebep olmuştur. Bu nedenle e-ticaret gıda perakende sektörü tüketici şikayetlerinin bilinmesi, firmaların müşteri memnuniyeti sağlamaları açısından oldukça önemlidir. Bu çalışmanın amacı Türkiye genelinde e-ticaret perakende sektöründe faaliyette bulunan iki büyük market zinciri müşterilerinin yapmış oldukları şikayetlerin içerik analizi yöntemi ile incelenmesidir. Bu kapsamda 01 Temmuz - 26 Ağustos 2020 tarihleri arasında www.sikayetvar.com sitesinden elde edilen e-ticaret gıda perakende işletmelerine yönelik toplam 443 şikâyet konularına göre çözümlenmiştir. Gerçekleştirilen çözümleme sonucunda ilgili e-ticaret gıda perakende tüketici şikayetlerinin büyük çoğunluğunun ürün ve ücret iadesi, ürün teslimatında gecikme olduğu tespit edilmiştir.

Introduction

The internet is a communication tool that is constantly growing worldwide and offers important opportunities to users. Internet perhaps the most important technological tool of the information age (Castells, 2010: 45), offers users the opportunity to store and share the generated information. In general, it is possible to define the internet as a communication network that changes the lifestyle of society, shapes its life and offers new opportunities to its users every day. Besides, effective use of information and communication technologies is an important issue to make the sources of economic development more functional (Yıldız et al., 2018: 11). Today, developments in internet networks and

Ali Tehci

Dr. Öğr. Üyesi, Ordu Üniversitesi,
a.tehci@odu.edu.tr,
Orcid: 0000-0001-9949-2794

Yusuf Ersoy

Öğr. Gör. Dr., Uşak Üniversitesi,
yusuf_ersoy@usak.edu.tr,
Orcid: 0000-0002-0106-1695

Article Type / Makale Türü

Research Article / Araştırma Makalesi

Keywords

E-Commerce, Digital Consumer, Content
Analysis, Customer Complaint, COVID-19

Anahtar Kelimeler

E-Ticaret, Dijital Tüketici, İçerik Analizi,
Tüketici Şikayeti, COVID-19

JEL: L81, M10, M31

Bilgilendirme

Bu çalışma 23-25 Eylül 2020 tarihinde Macaristan'da gerçekleştirilen 7. Uluslararası Sosyal Bilimler Kongresinde sunulan bildiriden genişletilerek türetilmiştir.

Submitted: 22 / 10 / 2020

Accepted: 22 / 12 / 2020

social media are important developments that increase consumer power in the digital age (Labrecque et al., 2013: 257). The developments in internet and communication and information technologies have converted consumers' traditional purchasing practices into digital purchasing practices (Onurlubaş and Yılmaz, 2016: 127). With the development of the Internet, the increase in the power of the consumer has created changes in the form of relations between the consumer and the firm (Kozinets 1999; Shipman 2001; Rezabakhsh et al., 2006: 3). The internet, which changed the balance of power between the consumer and the firm, did more than allow people to purchase a product or service in virtual environments (Lee and Cude, 2011: 90). Therefore, it is stated that the development of internet technologies and related features are important factors in consumer empowerment (Kozinets et al., 2010: 71). Strategic and tactical marketing approaches need to be developed in this area, especially since it is important to understand how benefiting from the opportunities of information technology affects individuals and their behaviors. (Hennig-Thurau et al., 2010: 312). The marketing is a field that changes and develops day by day, the importance of the digital age has been emphasized with the concept of "after digital" (Kotler, 2001: 6). For this reason, businesses need to use digital technologies and media effectively to achieve their marketing goals and to ensure customer satisfaction and loyalty on these platforms.

For digital marketing to be successful, it is stated that companies in developed countries understand the importance more, and multi-channel marketing communications as traditional and modern media must be integrated. The interaction between these channels is very important for developing a digital marketing strategy (Chaffey and Chadwick, 2016: 11). With digital technologies, companies can have data such as the past purchasing status of consumers. Firms can develop personalized products as a result of these data and increase the probability of purchasing by consumers (Kotler et al., 2017: 142). Digital platforms offer better-personalized marketing (Wind and Rangaswamy, 2001: 13). Digital consumers can interact more with companies. This provides companies with monitoring and performance scale opportunities (Chaffey and Patron, 2012: 35). Therefore, it can be said that digital marketing enables easier measurement compared to traditional marketing (Hennig-Thurau et al., 2010: 312; Makrides et al., 2019: 4). Situations such as creating a sincere customer understanding and protecting brand reputation are expressed as important challenges of digital marketing (Leeflang et al., 2014: 2). However, digital platforms provide significant opportunities for users to broadcast their feelings and thoughts about products or services (Dellarocas, 2003: 30). Especially digital consumers, who have been growing day by day do not want to be passive communication buyers. Thus, consumers want to interact with and compare their services and prices (Tkaczyk, 2016: 356).

Online shopping recently offers convenience for consumers to reach the desired product or alternative compared to traditional shopping. Consumers open any search engine and type what they are looking for. This situation can be seen as the biggest advantage of digital shopping channels compared to traditional shopping (Chang and Chin, 2011: 125). There may be product or service mistakes that cause customer dissatisfaction in all areas of trade. However, it is stated that effective complaint management by companies can provide benefits such as consumer satisfaction and loyalty (Gilly and Hansen, 1985: 5). Customer complaints can cause firms to improve their goods or services (East, 2000: 1077). Undoubtedly, it can be said that both businesses and customers can benefit from the result of this action. For this reason, it is seen that companies are increasingly interested in understanding and responding to consumers' dissatisfaction and complaints more effectively (Liu and McClure, 2001: 54). Because customer complaints are related to the value given to customers (Cho et al., 2002: 1). Information technologies have been used to evaluate customer complaints since the spread of the Internet (Mattila and Mount, 2003: 135). Considering that approximately two-thirds of the population are internet users in today's world (Statista, 2020), it can be said that information technologies are used more effectively. However, although there are studies on customer complaint behavior in traditional marketing approaches (East, 2000), it can be seen that studies on online customer complaints are limited (Kim et al., 2003; Chang and Chin, 2011: 125; Lee and Cude, 2011: 90). For this reason, it is thought that the study will be useful for companies that

operate or will operate in the e-commerce food retail sector in terms of determining digital consumer behaviors, expectations and ensuring customer satisfaction.

1. Purpose and Importance of the Research

The purpose of this research is to examine the methods of content analysis of the two largest supermarket chains that operate e-commerce complaints of customers in the retail sector in Turkey. In recent days, along with the developments in information technologies, complaint websites are seen as important platforms in collecting consumer problems and reporting to relevant companies. For this reason, the study aims to examine the complaint issues of e-commerce food retail customers objectively and systematically on complaint sites and to make suggestions to e-commerce retail companies in the context of production management and digital marketing. Many countries and sectors were adversely affected by the disaster, which emerged in Wuhan, China in December 2019 and expressed by the World Health Organization as the epidemic called COVID-19 on January 12, 2020. The World Health Organization has reported that since the emergence of COVID-19, there have been millions of COVID-19 cases worldwide, including hundreds of thousands of deaths (WHO). This situation necessitates the review and improvement of e-commerce and infrastructure systems in the sector. Therefore, the study is considered to be important in terms of classifying the consumer problems related to digital marketing opportunities and e-commerce infrastructures of the companies through content analysis and reporting to the companies.

2. Method of the Research

The content analysis method was used in the research. Content analysis, which is a qualitative research technique, is a widely used method to interpret the meaning coming from the content of the data. It is stated that this method is used in three approaches as traditional, directed and summative (Hsieh and Shannon, 2005: 1277). Therefore, in this study, traditional content analysis was preferred because the coding categories were directly obtained and interpreted from text data. With this preferred method, digital consumer problems for companies operating in the e-commerce food retail sector are tried to be examined and interpreted from a holistic perspective. It is thought that the suggestions made as a result of these results will be beneficial for the companies that operate or will operate in the e-commerce food retail sector in terms of production management and marketing.

3. The Universe and Sample of the Research

A purposeful sampling method was used to collect information about an event or situation in this study, which was conducted to examine consumer complaints within the scope of understanding consumer problems in the e-commerce food retail sector in the digital market. This research was conducted for the two major food retail supermarket chain in Turkey due to both time and cost constraints. Especially today, food retail shopping has gained importance in e-commerce due to the COVID-19 outbreak. Therefore, the study was conducted for e-commerce food retail consumers. For this purpose, the website www.sikayetvar.com, which has a high number of members and is thought to be effective in complaint management, was preferred for the research sample. Therefore, the research data includes customer complaints made as a result of e-commerce food retail shopping on the website www.sikayetvar.com where customer complaints are shared. Consumer complaints between 1 July - 26 August 2020 were included in the analysis. The number of complaints made in the relevant e-commerce companies regarding food shopping is shown in Table 1.

Table 1. Number of Complaints (01 July - 26 August)

Company	Frequency (f)	Percentage (%)
A	380	86
B	63	14
Total	443	100

Table 1 shows the number of complaints against e-commerce food retail companies in the online food shopping category on the dates specified on www.sikayetvar.com. It is seen that 380 complaints about firm A and 63 complaints about firm B were made on the specified dates. It is considered that the number of complaints made against the companies within the scope of the research should be evaluated in direct proportion to the capacity of the companies, the number of employees and the density of customers.

4. Analysis of Research Data

After the data obtained as a result of the research were transferred to the computer environment, it was tried to be analyzed using content analysis. In this context, the problems of two large food retail customers were evaluated in terms of similarities.

4.1. Findings

Within the scope of the research, the findings resulting from the analysis of the data obtained by classifying the complaints made by the customers of the company, which is designated as enterprise A in the e-trade food retail sector, according to their subjects are given in Table 2.

Table 2. Number and Rate of Complaints by Subject of Company A

Complaint Subject	Frequency (f)	Percentage (%)
Product and Refunds	97	25.52
Broken-Out-of-Date Product	69	18.16
Delay in Product Delivery	58	15.25
Missing-Wrong Item Delivery	50	13.16
Spoiled Vegetable or Fruit	27	7.11
Different Product Delivery	25	6.58
Customer Service Representative	24	6.32
Campaign Implementation	22	5.79
Excessive Bag Use	8	2.11
Total	380	100

As can be seen in Table 2, complaints against firm A are grouped according to their subjects. It is observed that approximately 26% of the complaints are related to product and price refunds, 18% to defective products or products close to the deadline, 15% to delay in product delivery and 13% to missing or wrong product delivery. Besides, it can be said, about 7% of the complaints were related to spoiled vegetables or fruit, 6% to the delivery of products other than the request, 6% to customer service or representative, 6% to the implementation of the campaign and 2% to the use of excess bags.

Table 3. Number and Rate of Complaints by Subject of Company B

Complaint Subject	Frequency (f)	Percentage (%)
Stock Problem	18	28.57
Delay in Product Delivery	14	22.22
Broken-Out-of-Date Product	11	17.47
Missing-Wrong Item Delivery	10	15.87
Product Return or Refund	10	15.87
Total	63	100

In Table 3, complaints about the firm coded as B are grouped according to their subjects. It can be seen that Approximately 29% of the complaints made are related to stock problems, 22% of them are about the delay in product delivery, 17% of them are about damaged or expired products, and 16% of them are related to missing or wrong product delivery, product return and reimbursement. When Table 2 and Table 3 are evaluated together, it can be seen that there are common complaints against A and B firms.

Conclusion

As a result of the internet technologies that are constantly growing worldwide and offer important opportunities to its users, the concept of digital consumer has come to the fore with the traditional consumer concept. Understanding of digital consumers, who can generally be defined as people who search for products on digital platforms, buy them and benefit from online content, is very important in today's competitive environment. Nowadays, consumers can realize their negative shopping experiences at no cost, regardless of distance and time. Developments in internet technologies that change the way consumers express their complaints about products, services and companies offer important opportunities to consumers and companies in this regard. Many countries and sectors have been adversely affected by the disaster, which occurred in Wuhan, China in December 2019 and expressed by the World Health Organization as the epidemic called COVID-19 on January 12, 2020. This situation caused consumers to spend more time and shop in digital environments. After all these developments, consumers have turned to digital platforms for food shopping.

Recently, with the developments in information technologies, complaint sites are seen as important platforms in collecting consumer problems and reporting to the relevant companies. Therefore, in this study, it is aimed to examine complaints of customers of the two largest market chains in the e-commerce food retail industry in Turkey with the content analysis method. When the results of the analysis are evaluated in general, it can be said that the vast majority of the related e-commerce food retail consumer complaints are product and fee refunds, delay in product delivery, spoiled or out of date products, stock problems and incomplete or incorrect product delivery. It is thought that knowing consumer complaints is very important for companies to ensure customer satisfaction and loyalty. Therefore, it can be said that researching consumer complaint behavior to understand consumer dissatisfaction and its consequences has become even more important in today's digital environment. It is recommended to reach consumers in future studies, to conduct studies with different research methods and to examine them in terms of demographic variables.

References

- Castells, M. (2010). *The Rise of the Network Society*, Wiley-Blackwell, Retrieved from <https://pdfs.semanticscholar.org/3746/ef34fd58d047d973008a0a723f832a83797e.pdf>
- Chaffey, D. & Ellis-Chadwick, F. (2016). *Digital Marketing, Strategy, Implementation and Practice*, Pearson Education, Sixth Edition Harlow. Retrieved from <https://hccnews.com/wpcontent/uploads/2019/08/Pearson.Digital.Marketing.6th.Edition.1292077611.pdf>
- Chaffey, D. & Patron, M. (2012). From Web Analytics to Digital Marketing Optimization: Increasing the Commercial Value of Digital Analytics. *Journal of Direct, Data and Digital Marketing Practice*, 14(1), 30-45.
- Chang, C. & Chin, Y. (2011). Comparing consumer complaint responses to online and offline environment. *Internet Research*, 21(2), 124-137.
- Cho, Y., Im, I., Hiltz, R. & Fjermestad, J. (2002). An Analysis of Online Customer Complaints: Implications for Web Complaint Management. In *Proceedings of the 35th Hawaii International Conference on System Sciences*, 2308-2317. Computer Society Press, Kona, Hawaii.
- Dellarocas, C. (2003). The Digitization of Word of Mouth: Promise and Challenges of Online Feedback Mechanisms. *Management Science*, 49(10), 1407-1424.
- East, R. (2000). Complaining as Planned Behavior. *Psychology & Marketing*, 17(12), 1077-95.
- Gilly M. C. and Hansen, R. W. (1985). Consumer Complaint Handling as a Strategic Marketing Tool. *Journal of Consumer Marketing*, 4(2), 5-16.
- Hennig-Thurau, T., Malhotra, E. C., Christian, F., Gensler, S., Lobschat, L., Rangaswamy, A. and Skiera B. (2010). The Impact of New Media on Customer Relationships, *Journal of Service Research*, 13(3), 311-330.
- Hsieh, H. F. & Shannon, S. (2005). Three Approaches to Qualitative Content Analysis. *Qualitative Health Research*, 15, 1277-1288.
-

-
- Kim, C., Kim, S., Im, S. & Shin, C. (2003). The Effect of Attitude and Perception on Consumer Complaint Intentions. *Journal of Consumer Marketing*, 20(4/5), 352-371.
- Kotler, P. Kartajaya, H. & Setiawan, I. (2017). *Marketing 4.0 Moving from Traditional to Digital*, John Wiley & Sons, Inc., Hoboken, New Jersey.
- Kotler, P., (2001). *Marketing in the Digital Age*, Capital, Istanbul.
- Kozinets, R. V., Valck, K., Wojnicki A. C. & Wilner Sarah J. S. (2010). Networked Narratives: Understanding Word-of-Mouth Marketing in Online Communities. *Journal of Marketing*, 74(2), 71-89.
- Kozinets, R. V. (1999). E-Tribalized Marketing? The Strategic Implications of Virtual Communities of Consumption, *European Management Journal*, 17(3), 252-64.
- Labrecque, L. I., Jonas vor dem E., Charla, M., Thomas P. N. & Charles F. H. (2013). Consumer Power: Evolution in the Digital Age, *Journal of Interactive Marketing*, 27(4), 257-269.
- Lee, S. & Cude, B. J. (2012). Consumer Complaint Channel Choice in Online and Off-line Purchases. *International Journal of Consumer Studies*, 36, 90-96.
- Leeflang, P. C. Verhoef, P. D. & Tjark F. (2014). Challenges and Solutions for Marketing in a Digital Era. *European Management Journal*, 32(1), 1-12.
- Liu, R. R. & McClure, P. (2001). Recognising Cross-Cultural Differences in Consumer Complaint Behavior and Intentions: An Empirical Examination. *Journal of Consumer Marketing*, 18(1), 54-74.
- Makrides, A., Vrontis, D. & Christofi, M. (2019). The Gold Rush of Digital Marketing: Assessing Prospects of Building Brand Awareness Overseas. *Business Perspectives and Research*, 8(1), 4-20.
- Mattila, A. S. & Mount, D. J. (2003). The Impact of Selected Customer Characteristics and Response Time on E-Complaint Satisfaction and Return Intent. *International Journal of Hospitality Management*, 22(2), 135-145.
- Onurlubaş, E. & Yılmaz, N. (2016). Consumer Thoughts About the Websites That Do E-Marketing Through Internet, *JASSS, The Journal of Academic Social Science Studies*, (42), 127-144.
- Reزابakhsh, B., Bornemann, D., Hansen, U. & Schrader, U. (2006). Consumer Power: A Comparison of The Old Economy and The Internet Economy. *Journal of Consumer Policy*, 29, 3-36.
- Shipman, A. (2001). Privatized Production, Socialized Consumption? Old Producer Power Behind the New Consumer Sovereignty, *Review of Social Economy*, 59(3), 331-352.
- Tkaczyk, J. (2016). Digital Consumer: Trends and Challenges: in book: *Impact of Digital World on Marketing and Management*. Poltext, 1, 353-367.
- Wind, J. & Rangaswamy, A. (2001). Customerization: The Next Revolution in Mass Customization. *Journal of Interactive Marketing*, 15(1), 13-32.
- Yıldız, S., Topal, M.H., Yıldız, E. & Tosunoğlu, B. (2018). Factors Affecting the Use of E-Government Services by Companies: An Application on EKAP. *The Journal of International Scientific Researches*, 3(1), 11-28.
- <https://www.statista.com/statistics/617136/digital-population-worldwide/>
<https://covid19.who.int/>
-

Analysis of Internal Financial Factors Affecting Stock Price in Airline Businesses

Havayolu İşletmelerinde Hisse Senedi Fiyatını Etkileyen İşletme İçi Finansal Faktörlerin Analizi

Abstract

Along with the supply-demand effect, factors such as the economic situation of the country, future expectations and the performance of the enterprises are quite effective in determining the stock price. In this context, it is aimed to reveal the relationship between the internal financial factors of airline businesses and the stock price. In practice, the annual internal data of 28 airline businesses covering the years 2005-2018 were analyzed using panel data and panel VAR analysis methods, and the internal (TA, FL, ATR, OPM and BV) factors that determine the stock price were determined. As a result of the panel data analysis applied, it was determined that the total assets variable had a positive effect on stock prices, while the financial leverage variable had a negative effect. According to the panel VAR causality results, bidirectional causality between the total asset variable and the stock price, one-way causality between the beta value and acid-test ratio variables and the stock price was determined. In summary, airlines can increase their stock value by taking advantage of economies of scale, optimizing the liquidity situation, and taking into account the negative impact of financial leverage.

Öz

Hisse senedi fiyatının belirlenmesinde, arz-talep etkisiyle birlikte, ülkenin ekonomik durumu, gelecek beklentileri ve işletmelerin performansı gibi faktörler oldukça etkilidir. Bu kapsamda, havayolu işletmelerine ait işletme içi finansal faktörlerin hisse senedi fiyatı ile ilişkilerinin ortaya konulması hedeflenmektedir. Uygulamada 28 havayolu işletmesine ait 2005-2018 yıllarını kapsayan yıllık işletme içi veriler, panel veri ve panel VAR analizi yöntemleriyle analiz edilmiş olup, hisse senedi fiyatını belirleyen işletme içi (TV, FK, ATO, FKM ve BD) faktörler tespit edilmiştir. Uygulanan panel veri analizi sonucunda, toplam varlıklar değişkeninin hisse senedi fiyatlarını pozitif etkilediği, finansal kaldıraç değişkeninin ise negatif etkilediği tespit edilmiştir. Panel VAR nedensellik sonuçlarına göre, toplam varlık değişkeni ile hisse senedi fiyatı arasında çift yönlü nedensellik, beta değeri ve asit-test oranı değişkenleri ile hisse senedi fiyatı arasında tek yönlü nedenselliğin olduğu tespit edilmiştir. Özetle, havayolu işletmeleri ölçek ekonomisinden faydalanmak suretiyle, likidite durumunu optimize ederek ve finansal kaldıraçın negatif etkisini hesaba katarak hisse senedi değerlerini arttırabilirler.

Introduction

The main purpose of firms is to increase stock value in the meaning of maximizing market value. The stock price is a share value export by the issuer that contains the information required by the investor to evaluate the performance of an enterprise (exporting).

Stocks, one of the securities instruments for investors, are among the risky investments. In the context of the risk-return relationship, investors primarily pay attention to mobility (increase or decrease) of stock prices while making investment decisions. Stock prices are affected adversely or positively by the amount of stock demand and supply in the capital market, if the stock demand is higher than the stock offer, the stock price increases, otherwise if the stock bid is higher than the

Abdulkadir Alıcı

Arş. Gör. Dr., Necmettin Erbakan
Üniversitesi, Havacılık ve Uzay Bilimleri
Fakültesi, Havacılık Yönetimi Bölümü,
aalici@erbakan.edu.tr
Orcid: 0000-0002-4796-6385

Güven Sevil

Prof. Dr., Anadolu Üniversitesi,
Açıköğretim Fakültesi,
gsevil@anadolu.edu.tr
Orcid: 0000-0001-7592-3799

Article Type / Makale Türü

Research Article / Araştırma Makalesi

Anahtar Kelimeler

Hisse senedi fiyatları, havayolu işletmeleri,
panel veri analizi, panel VAR analizi.

Keywords

Stock prices, Airline Businesses, Panel data
analysis, Panel VAR analysis.

JEL: B23, G17, G30

Bilgilendirme

Bu çalışma 03-05 Aralık 2020 tarihinde
Gümüşhane'de düzenlenen "International
Scientific Researches Congress 2020
Gümüşhane" de sunulan bildirden
türetilmiştir.

Submitted: 04 / 12 / 2020

Accepted: 31 / 12 / 2020

stock market demand, the stock price can decline. There is a crucial issue is that in determining the stock price, commonly including the supply-demand effect, the economic condition of the country, future expectations and the performance of the enterprises are very efficient. In this research includes the mutual financial relationships between the stock prices of airline businesses and internal factors in the world.

The main purpose of the study is that by analysing the internal financial factors affecting the stock prices of the airline businesses, it is intended to determine whether there are significant differences between the stock prices of the airline businesses and the internal factors and to test them with the factors affecting the stock prices in the economic literature. It is claimed that identifying internal financial factors that affect stock prices will contribute to airline managers in measuring and managing operational and financial performance. Moreover, it is believed that by the determination of these factors will lead to investors and policy makers. There are many factors affecting the stock price in airline businesses. In the study, it is aimed to investigate whether internal financial data can affect stock prices. In this context, in advance starting the analysis, the relation of financial factors with the stock price is defined conceptually, and it is also mentioned in the literature. Then, it was continued by including information about the analysis technique. Finally, by applying the analysis stages and the findings were reached and a general assessment was made about the analysis.

1. Relationship Between Stock Prices and Internal Financial Factors

The study aims to estimate the relationship between airlines' internal financial factors and stock prices. To do this, the conceptual relationship (in terms of relevant literature) between internal financial factors and stock prices needs to be revealed. Internal financial factors to be used in the study include firm size (total assets), liquidity (acid-test ratio), profitability (operating profit margin), beta value, and financial leverage variables.

1.1. Relationship between Firm Size and Stock Prices

Firm size has an important place among the investment criteria. Usually, large businesses offer investors better investment opportunities than smaller ones. Similarly, large businesses often have a stronger and more dominant position in the stock market due to their higher production capacities (Sharma, 2011, p.56). It is stated that large firms face fewer risks due to the fact that they are highly diversified and are therefore less prone to financial distress (Titman and Wessels, 1998). However, it is also stated that firm size has a negative effect on systematic risk during recessions (Lee and Jang, 2007).

There are two important factors that express firm size: The total assets of the firm and The capacity indicator regarding the area in which the firm operates. In the airline industry, capacity is expressed as available seat kilometers (ASK). For businesses, both indicators refer to scale indicators. Businesses with larger assets and capacities in their economies of scale have the advantage of offering products or services at lower costs (Cook and Billig, 2017, p.207). In order for airlines to benefit from economies of scale, they need to expand their flight networks and increase flight frequency and perform long-range flights (Oum and Zhang, 1997, p.310; Küçük Yılmaz, 2016, p.40). Airlines benefiting from the economy of scale show higher efficiency at lower costs than their competitors, thus having a competitive advantage over them. Therefore, it is thought that competitive advantage will bring profitability for airlines, which will, in turn, positively reflect on the stock price. In the study, the total assets indicator is used as the firm size.

1.2. Relationship between Liquidity and Stock Prices

Businesses' working capital is related to the efficiency and productivity of their short term cash flows. A well-designed cash flow and working capital are expected to positively contribute to the value of businesses in terms of performance and productivity. A business should maintain a good balance between profitability and liquidity while using its working capital (Padachi, 2006, p.45). Therefore, rather than increasing their cash amounts or liquid amounts, businesses should aim to invest excess liquid amounts in assets and thus obtain a better return. Efficient use of liquidity also positively affects the profitability of the business (Davis and Peles, 1993, p. 729 as cited in Aydemir et al., 2012, p. 278).

Liquidity risk is very important for airlines. Since the airline industry is a fairly cyclical and seasonal industry, airlines experience difficulties in cash flow in some periods of the year. In such periods, airlines may be exposed to short-term liquidity risk (Moody's-Passenger Airline Industry, 2018, p.18). Airlines often use bank loans as a short-term source of financing to manage short-term liquidity squeeze. In the case of long-term liquidity risks, airlines may want to shrink and minimize the risk (Standard and Poor's, 2018, p.16).

It is known that the liquidity squeeze may cause a business to default. Thus, a business with a low liquidity ratio may face the risk of being unable to repay existing debts and going bankrupt. In summary, the optimum liquidity level is one of the most important factors affecting positively the profitability of a business.

1.3. Relationship between Profitability and Stock Prices

Profitability ratios, which indicate business performance ratios, reflect the ability of a business to earn profits on sales, assets, and equity, and show how well the business uses its resources to increase stock value. The long-term profitability of a business increases both the sustainability of the business and shareholders' and investors' interest in and demand for stocks (Arkan, 2016, p. 18).

Airlines have a profitability structure that is very sensitive to and fragile against macroeconomic events (Asian crisis, 2008 economic recession) and major destructive events (war, terrorism, natural disasters, etc.). For example, after the terrorist attack on the twin towers in the USA, the demand for air travel in the USA decreased by 7.4%, resulting in a reduction in the profitability of many airlines. But despite all the negative developments, the airline industry was able to recover quickly and regain its former profitability. Since the early 1970s, the number of airline passengers has increased exponentially (Vasigh et al., 2013, p.14; Cook and Billig, 2017, p.164-165).

1.4. Relationship between Beta Value and Stock Prices

When investing in securities, investors pay attention to the risk-return relationships of securities. Because, in the selection of security instruments, the changes between risk and return are of great importance in terms of the stock price (Ceylan & Korkmaz, 2000, p. 264). While making investment decisions, investors consider the beta coefficient of securities as a risk metric. Beta coefficient indicates the sensitivity of the return of the security (stock, etc.) to market return (BIST100, etc.) (Tetik & Uğur, 2010, p. 15-16). Investors can estimate the increase or decrease in the stock price by looking at the beta coefficient of businesses. For example, if the beta value of Turkish Airlines stock is equal to 1, a 3% increase in the value of that share should be expected when the index (BIST100) increases by 3%, and a 3% decrease should be expected when the index decreases by 3%. For this reason, in the context of the airline industry, beta value, one of the stock market performance ratios, is thought to be significantly correlated with the stock price.

1.5. Relationship between Financial Leverage and Stock Prices

Increasing costs (fuel, workforce, operation, etc.) increase the operating leverage and thus operational risks. Many airlines have difficulty finding sufficient revenues to cover their increasing costs and therefore use external borrowing to continue their operations. Increasing external borrowing increases businesses' financial leverage ratio (Lee and Jang, 2007, p. 440). A firm's business risk depends on its operating cycle and its response to operating leverage, thus increasing the impact of the leverage on risk. On the other hand, financial leverage, which shows the degree of a firm's utilization from debt, is similar to operating leverage. Therefore, a firm with high financial leverage tends to have a high risk (Hung and Liu, 2005, p. 295). In other words, the risk of a firm with high financial leverage increases, just like its profitability.

2. Literature

There are many studies examining the relationship between internal financial factors and stock prices in different industries. However, there is no study examining the relationship between stock prices and internal factors in the context of the airline industry. Some studies examined the relationship between systematic risk (beta), which is thought to be associated with the stock price, and internal factors.

The study conducted by Liu and Hung (2005) investigated the effect of stock prices and certain variables such as business cycle, operating leverage, financial leverage, total assets, debt/equity ratio, and return on equity on systematic risk of China Airlines and EVA Airways for 1993-2004. As a result of the analysis performed with the CAPM and 3-factor model, it was found that the business cycle, operating and financial leverage, and capital structure positively influenced but the return on equity negatively influenced the sample airlines' betas.

Lee and Jang (2007) aimed to investigate the relationship between firm-specific variables of 16 airlines and systematic risk for the period of 1997-2002. The variables used in their study include liquidity, financial leverage, operating efficiency, profitability, firm size, growth, and safety. According to the results of the multiple regression analysis, it was determined that profitability, growth, and safety factors negatively affected systematic risk, but financial leverage and firm size positively affected systematic risk. The authors recommended that future research include more firm-specific variables such as stock turnover ratio and earning dividend ranking.

In their study to investigate the determinants of systematic risk for the East Asian airline industry, Hooy and Lee (2010) used panel data from seven airlines in East Asia for the period of 1999-2009. The authors conducted analyses using the CAPM, 3-Factor Model, and International 4-factor models. Systematic risk determinants used in the study include:

- Firm size - Total assets
- Liquidity - Acid/test ratio
- Profitability - Net profit/Assets
- Operating leverage - Percentage change in EBIT/Percentage change in sales
- Financial leverage - Total debts/Total assets
- Operating efficiency - Total revenue/Total assets
- Growth - Annual Percentage Change in EBIT
- Airlines safety - How many accidents per year (dummy variable)
- Asian financial crisis - 1997 - 1999 (dummy variable)

As a result of the analysis carried out with the relevant models, the authors concluded that only firm size and operational efficiency positively affect the systematic risk and that another important determinant was airline safety.

Lee and Hooy (2012) employed a five-factor asset-pricing model to estimate the systematic financial risk exposure of airlines in North America, Europe, and Asia between 1990 and 2010. The systematic risk determinants used in the study include firm size (measured by assets), profitability, financial leverage, and operating leverage. The authors concluded that the risk to North American airlines was positively related to operating leverage and profitability, but while European and Asian airlines also had risk positively related to operating leverage, their risks were negatively related to earnings growth. The authors also noted that the most important systematic risk determinant for Asian airlines was their size.

Also, Vasigh et al. (2015) listed the major risks for the airline industry as follows:

- Airline size
- Ownership structure
- Operating leverage
- Financial leverage
- Liquidity
- Oil prices
- The threat of labor action
- Aviation accidents
- Number of businesses seeking bankruptcy protection

As a result of the literature review on the airline industry, it has been revealed that firm size, profitability, EPS, operating leverage, financial leverage variables as internal financial factors determine the systematic risk. Based on this, it is assumed that these variables can also be related to the stock price. In this context, in the application part of the study, the relationship of financial factors [firm size (TA), liquidity (ATR), profitability (OPM), beta value (BV), and financial leverage (FL)]

with stock prices for airlines was analyzed. Since there is no study on the effects of airlines' internal financial factors on their stock prices, the results of the present study are expected to contribute to the literature.

3. Method, Data, and Model

This study aimed to examine the internal financial factors affecting the stock prices of airlines. Twenty-eight airlines with uninterrupted financial data for the period of 2005-2018 were included in the study. Internal financial data (independent variables) and stock price data of the airlines in the sample were obtained from the Thomson Reuters Datastream. Panel data analysis and Panel VAR analysis were used, and analyses were carried out with GAUSS-10, STATA-15, and EViews-9 software packages. First of all, the panel data and panel VAR models used in the analyses are discussed.

The data resulting from the combination of time-series data and cross-sectional data is called longitudinal data or pooled data. Time and cross-section dimensions of such data may differ. Longitudinal or pooled data with unchanged horizontal section units are called panel data (Güriş, 2015, p. 2). The use of panel data provides many advantages in economics research compared to cross-sectional or time-series data. Panel data allows obtaining more observations than cross-sectional and time-series data. This increases the degree of freedom and decreases the collinearity between independent variables. Panel data usage also increases the efficiency of econometric estimates. In addition, the use of longitudinal data allows the researcher to perform a series of analyses that cannot be done using cross-sectional or time-series data (Hsiao, 2003, p. 3).

The panel data model is essentially a regression model estimated with panel data. Therefore, the tests, assumptions, and other features in the regression model are also valid for panel data models. Panel data models contain one dependent and one or more independent variables. In addition, since the model is a statistical or econometric model, the term error is also included in the model. Since the variables in the model show the change according to both units and time, different indices are used in the representation of both. "i" and "t" sub-indices in the panel data analysis indicate units and time, respectively (Güriş, 2015, p. 4-5). A linear panel data model made with panel data, where the dependent variable is represented by Y and the independent variable or variables are represented by X, can be shown as follows (Erol, 2007, p.33).

$$Y_{it} = \alpha_{it} + \beta_{it} + X_{it} + \varepsilon_{it}$$

Holt-Eakin, Newey, and Rosen (1988), who applied Sims' (1980) traditional VAR model to panel data and included the cross-section dimension in the model, obtained more robust results with the Panel VAR model. In the VAR model, which accepts all variables in the system as internal and independent, each variable consists of its own lag value and the lag values of other variables. One of the advantages of the VAR model is that it consists of a set of equations rather than a single equation. The Panel VAR model, on the other hand, provides asymptotic results by including unobservable unit effects into the model. The use of panel data practically violates the restriction that all units making up the cross-section are the same and that the coefficient matrix is the same in all units that make up the data. For this reason, fixed effects are added to the model in order to enable the heterogeneous structure specific to cross-section units (Türküz, 2016, p. 101; Yerdelen Tatoğlu, 2018, p. 121).

Under the assumption that all variables are internal, the Panel VAR model with maximum lag length p created with panel data is expressed as follows.

$$y_{it} = \delta_{1i0} + \sum_{j=1}^p \theta_{11j} y_{it-j} + \sum_{j=1}^p \theta_{12j} x_{it-j} + \lambda_{1i0} + \mu_{10t} + \varepsilon_{yit}$$

$$y_{it} = \delta_{2i0} + \sum_{j=1}^p \theta_{21j} y_{it-j} + \sum_{j=1}^p \theta_{22j} x_{it-j} + \lambda_{2i0} + \mu_{20t} + \varepsilon_{xit} \tag{1}$$

It is expressed in closed form as follows;

$$z_{it} = \Gamma_0 + \Gamma_1 z_{it-1} + f_i + \lambda_t + e_t \tag{2}$$

is obtained. $z_{it} = \begin{bmatrix} y_{it} \\ x_{it} \end{bmatrix}$, $\Gamma_0 = \begin{bmatrix} \alpha_{1i0} \\ \alpha_{2i0} \end{bmatrix}$, $\Gamma_1 = \begin{bmatrix} \alpha_{11j} & \alpha_{12j} \\ \alpha_{21j} & \alpha_{22j} \end{bmatrix}$, $z_{it-1} = \begin{bmatrix} y_{it-j} \\ x_{it-j} \end{bmatrix}$, $f_i = \begin{bmatrix} f_{1i0} \\ f_{2i0} \end{bmatrix}$, $\eta_t = \begin{bmatrix} \eta_{10t} \\ \eta_{20t} \end{bmatrix}$ and $e_t = \begin{bmatrix} \varepsilon_{yit} \\ \varepsilon_{xit} \end{bmatrix}$. While f_i represents unit effects, η_t indicates unobservable time effects-random effects. Since the PVAR model requires the restriction that each cross-section dimension is on the same substructure in order to overcome the problems that arise with the addition of the cross-section dimension, the Γ_1 parameters vector is assumed to be the same for all units. With the thought that the existence of unit-specific heterogeneity would practically violate this restriction, the PVAR model includes unit effects as in (4.2). Since fixed effects are associated with regressors due to the lags of dependent variables, the mean-differentiation procedure widely used to eliminate fixed effects will create bias coefficients. Since it is thought that the differentiation method based on group averages for the purpose of deducting fixed effects from the model can cause biased parameter results, the required orthogonality assumptions can be achieved by taking a forward difference with the "Helmert Method" proposed by Arrellano and Bover (1995) (Love and Zicchino, 2006, p.195).

$$\Delta y_{it} = \delta_{1i0} d_t + \sum_{j=1}^p \theta_{11ij} \Delta y_{it-j} + \sum_{j=1}^p \theta_{12ij} \Delta x_{it-j} + \lambda_{1i} \varepsilon_{it-1} + u_{1it}$$

$$\Delta x_{it} = \delta_{2i0} d_t + \sum_{j=1}^p \theta_{21ij} \Delta y_{it-j} + \sum_{j=1}^p \theta_{22ij} \Delta x_{it-j} + \lambda_{2i} \varepsilon_{it-1} + u_{2it} \tag{3}$$

d_t is a vector representing deterministic components and expressed by $d_t = 1$. δ_i , in this case, is a (k x 1) or (k x 2) dimensional matrix of parameters. Thus, when $\delta_i d_t$ is a (k x 1) dimensional vector, it will be δ_{11i0} or $\delta_{11i0} + \delta_{12i0} t$ (Anderson et al., 2006, p. 4). The "p" lag length is determined with the help of information criteria. Engle and Granger (1987) argue that the presence of a cointegration relationship between two variables means that these variables are in equilibrium in the long run, but there may be some deviations from the equilibrium in the short run. These deviations that may occur in the short run can be corrected with the help of an error correction mechanism (Sevüktekin & Nargeleçekenler, 2010, p. 489). In the above equations, the error correction mechanism is represented by $\lambda_{1i} \varepsilon_{it-1}$. On the other hand, λ denotes the adjustment parameter (return to equilibrium speed) with a value in the range of $-1 \leq \lambda \leq 0$ and should be statistically significant (Türküz, 2016, p. 103).

Since the first Panel VAR study developed by Holt-Eakin, Newey, and Rosen (1998), the use of the Panel VAR model has become quite common today. The estimation of panel VAR models is possible by completing certain stages and fulfilling certain conditions. The estimation of the panel VAR model includes the selection of the model, its creation, causality relationship, stability analysis, variance decomposition, and impulse-response analysis. As in the time series analysis, in the Panel VAR method, the coefficient interpretation and significance of the variables are not important, so the created model is interpreted with variance decomposition and impulse-response analysis.

Table 1 below provides a list of 28 airline businesses included in the study.

Table 1. Airlines Included in the Study

Turkish Airlines	Skywest Airlines
United Airlines	Eva Airways
Cathay Pacific	Finnair
Air Canada	El-Al Airlines
Singapore Airlines	Southwest Airlines
Qantas Airlines	Easyjet

Lufthansa	Norwegian
Air China	GOL Linhas Aeras
Korean Air	Westjet
Air France-KLM	Jetblue
Scandinavian Airlines	China Southern
Alaska Airlines	China Eastern
Thai Airlines	LATAM Airlines
All Nipon (ANA) Airlines	Aeroflot

The independent variables that determine the stock prices in the study were selected from the variables used in the literature. In this context, as independent variables; beta value, acid-test ratio, total assets, financial leverage and operating profit margin variables are used. Stock price data is used as dependent variable. The abbreviation, definition and measurement method of the variables used in the study are shown in Table 2 below.

Table 2. Definitions and Abbreviations of Variables Used in the Model

Variables	Symbol	Measurement Indicator	Measurement Method
Dependent Variable	SP	Stock Price	<i>Stock Price</i>
Independent Variables	BV	Beta Value	$\beta_{i,m} = \frac{Cov_{i,m}}{Var_m}$
	ATR	Acid-Test Ratio	$\frac{Current\ Assets - Stocks}{Current\ Liabilities}$
	TA	Total Assets	Price of Total Assets
	FL	Financial Leverage	$\frac{Total\ Debt}{Total\ Assets}$
	OPM	Operating Profit Margin	$\frac{Operating\ Profit}{Net\ Sales} \times 100$

As a result of the literature reviews, it is desired to examine the relationship between the variables expressed in Table 2 above. Hypotheses related to the relevant variables within the scope of the theoretical framework are listed below:

Ho: There is a relationship between internal financial factors and stock prices.

H1: There is no relationship between internal financial factors and stock prices.

The relationship between the explanatory variables and the stock price has been estimated:

- There is a positive relationship between profitability and stock price.
- There is a positive relationship between liquidity and stock price.
- There is a negative relationship between financial leverage and stock price.
- There is a positive relationship between firm size and stock price.
- There is a positive relationship between beta value and stock price.

4. Research Findings

Using annual data for the period between 2005 and 2018, this study investigated the relationship between airline stock prices and internal factors and studied the dynamic relationships between stock prices, liquidity status (acid-test ratio), firm size (total assets), profitability (operating profit margin), financial leverage, and beta value. A model was established by taking the logarithms of all variables. First, estimations were made with panel data analysis, and then dynamic relationships were examined with Panel VAR analysis. As in all time-series analyses, firstly cross-sectional dependence and unit root tests are performed to determine whether the series are stationary or not.

A cross-sectional dependence test was performed to determine whether there is a cross-sectional dependence in the variables in the model. In the case of cross-sectional dependence in series, it is

necessary to determine the degree of integration of the series by using the second-generation unit root tests. If there is no cross-sectional dependence in the series, the stationarity levels of the variables can be determined using the first-generation stationarity tests.

Table 3. Cross-Sectional Dependence Test Results

Variable	CDLM adj.		
	Statistics	Prob.	Decision
LOGSP	9.027	0.000	Ho Rej.
LOGBV	4.102	0.000	Ho Rej.
LOGATR	2.507	0.006	Ho Rej.
LOGTA	5.587	0.000	Ho Rej.
LOGOPM	3.692	0.000	Ho Rej.
LOGFL	3.591	0.000	Ho Rej.

Note: In all hypothesis tests, significance was set at 0.05 (5%).

Table 3 presents the cross-sectional dependence test results for the variables. According to the analysis, the H_0 hypothesis established as "no cross-sectional dependence" for all variables is rejected. Therefore, the stationarity levels can be determined by performing the second-generation unit root test.

Table 4. CADF Panel Unit Root Test

Variables	Model	Stat.	Critical Values		
			1%	5%	10%
LOGSP	Fixed	-2.36	-2.34	-2.17	-2.07
	Fixed and Trend	-2.299	-2.88	-2.69	-2.08
ΔLOGSP	Fixed	-2.462	-2.34	-2.17	-2.07
	Fixed and Trend	-2.159	-2.88	-2.69	-2.08
LOGBV	Fixed	-2.383	-2.34	-2.17	-2.07
	Fixed and Trend	-2.214	-2.88	-2.69	-2.08
ΔLOGBV	Fixed	-2.280	-2.34	-2.17	-2.07
	Fixed and Trend	-2.499	-2.88	-2.69	-2.08
LOGATR	Fixed	-1.846	-2.34	-2.17	-2.07
	Fixed and Trend	-2.313	-2.88	-2.69	-2.08
ΔLOGATR	Fixed	-2.421	-2.34	-2.17	-2.07
	Fixed and Trend	-2.508	-2.88	-2.69	-2.08
LOGTA	Fixed	-1.415	-2.34	-2.17	-2.07
	Fixed and Trend	-1.027	-2.88	-2.69	-2.08
ΔLOGTA	Fixed	-1.442	-2.34	-2.17	-2.07
	Fixed and Trend	-1.714	-2.88	-2.69	-2.08
LOGOPM	Fixed	-1.584	-2.34	-2.17	-2.07
	Fixed and Trend	-1.745	-2.88	-2.69	-2.08
ΔLOGOPM	Fixed	-2.021	-2.34	-2.17	-2.07
	Fixed and Trend	-2.137	-2.88	-2.69	-2.08
LOGFL	Fixed	-1.878	-2.34	-2.17	-2.07
	Fixed and Trend	-2.317	-2.88	-2.69	-2.08

Δ LOGFL	Fixed	-2.362	-2.34	-2.17	-2.07
	Fixed and Trend	-2.637	-2.88	-2.69	-2.08

Notes: Notes: The Δ notation indicates the first-order difference of the series. The *, **, and *** values show that the test statistics are significant at 1%, 5%, and 10% significance levels, respectively. CADF test statistics critical values were obtained from Pesaran (2007). In all hypothesis tests, significance was set at 0.05 (5%).

Since all the variables in the study (SP, TA, ATR, OPM, and FL) have cross-sectional dependence, the second-generation unit root test (CADF) was applied to these variables. Table 4 presents the results of the CADF panel unit root test statistics. According to the test results, it was determined that LOGATR, LOGTA, LOGOPM, and LOGFL variables were not stationary, and the model was established by taking the first differences of these variables.

4.1. Panel data model selection and estimation results

Before the PVAR model, panel data analysis estimation results will be examined and interpreted. First of all, either the fixed-effects model or the random-effects model should be selected for model estimation. To select the appropriate model, the Hausman test was used.

Table 5. Hausman Test

Test Hypothesis	Statistics	Probability	Decision
Random-effects model is appropriate.	0.2200	0.9989	Ho Accepted

Table 5 presents the results of the Hausman test statistics performed to test the random-effects model against the fixed-effects model and to test the H_0 hypothesis that "the difference between parameters is not systematic" (the random-effects model is appropriate). As can be inferred from the table, the H_0 hypothesis is accepted. In this case, the random-effects model was deemed appropriate for model estimation.

Once the appropriate model has been determined, heteroscedasticity and autocorrelation tests should be performed.

Table 6. Heteroscedasticity Test Results

	Statistics	Probability	Degree of Freedom	Test Hypothesis	Decision
W0	6.2232	0.0000	df (27, 336)	Ho Rej.	Heteroscedastic.
W50	3.9760	0.0000	df (27, 336)	Ho Rej.	
W10	5.7248	0.0000	df (27, 336)	Ho Rej.	

The heteroscedasticity test results revealed that the variance in the model is not fixed, in other words, there is a heteroscedasticity problem.

Table 7. Autocorrelation Test Results

Test	Statistics
Durbin Watson (DW)	0.7330
Baltagi-Wu (LBI)	0.9257

No critical value has been specified in the literature, but DW and LBI statistical values below 2 indicate autocorrelation. As seen in Table 7, the statistical value for DW and LBI autocorrelation tests is below 2. Therefore, there is an autocorrelation problem in the model.

As a result of the tests, the analysis was carried out with the Arellano-Froot-Rogers estimator, which takes into account both heteroscedasticity and autocorrelation problems.

Table 8. Panel Data Estimation Results (Arellano-Froot-Rogers Resistant Estimation Results)

Variable	Coefficient Estimation	Arellano, Froot, and Rogers Standard Error	z	Prob.	(95% Confidence Interval)	
LOGBV	0.069332	0.058533	1.18	0.236	-0.045390	0.184054
DLOGATR	0.112405	0.100615	1.12	0.264	-0.084797	0.309608

DLOGTA	1.270768	0.490221	2.59	0.010	0.309951	2.231584
DLOGOPM	0.029307	0.018233	1.61	0.108	-0.006428	0.065043
DLOGFL	-0.45624	0.227547	-2.01	0.045	-0.902225	-0.01025
C	1.392917	0.202510	6.88	0.000	0.996003	1.789829
Number of Observations: 364	F(3,4) = 47.79			R ² = 0.273		
Group Size: 28	Prob > x ² = 0.0000			Wald x ² (5) = 63.95		

Table 8 presents the resistant estimator results of the model in which stock prices (LOGSP) are used as dependent variables. According to the results of the random-effects model, which examines the factors determining the stock price, the total assets (DLOGTA) variable, which indicates the firm size, has a positive effect on the stock price at the 5% significance level. Also, the financial leverage (DLOGFL) variable has a negative effect on the stock price at the 5% significance level. No significant relationship was found between the other variables (LOGBV, DLOGATR, and DLOGOPM) and the stock price.

A Panel VAR analysis was conducted to examine the dimensions (causality, impulse-response, and variance decomposition analyses) of the significant relationship found in the panel data analysis.

The Pedroni (2001) cointegration test used in the assumption of cross-sectional independence and the Kao (1999) test used in the presence of cross-sectional dependence should be applied taking into account the features provided by the series.

The Breusch-Pagan test was performed to investigate the presence of cross-sectional dependence in the residuals of the model formed by the variables. The results are given in Table 9.

Table 9. Breusch-Pagan (1980) Cross-Sectional Dependence Test Results

	x ² statistics	Probability Value
Breusch Pagan - LM Test	1836.58	0.000*

*The H₀ hypothesis is rejected with a margin of error of 1%, 5%, 10%.

According to the results, the Breusch-Pagan (1980) LM test yielded consistent results with the Pesaran (2004) CD test, thus rejecting the basic hypothesis that there is no cross-sectional dependence. Hence, with the help of the error correction model, the long-term relationship between series can be tested with Kao (1999) in this study.

Table 10. Kao (1999) Cointegration Test Results

	Test Statistics	Probability Values	Results
Modified Dickey-Fuller t	1.1626	0.1225	Ho Accepted
Dickey-Fuller t	-0.5096	0.3052	Ho Accepted
Augmented Dickey-Fuller t	0.7984	0.2123	Ho Accepted

According to the results of the cointegration test, all of the statistical tests cannot reject the H₀ hypothesis that there is no cointegration with 1%, 5%, 10% margin of error. It is concluded that there is no long-term relationship between all variables included in the analysis.

4.2. Estimation results of the panel VAR model

Before starting the analysis, it is necessary to determine the appropriate lag length for the estimation of the PVAR model, as in VAR models. After the lag length was determined, the estimation results of the PVAR model were revealed. Afterward, the stability analysis of the model was carried out, and finally, causality, impulse-response, and variance decomposition analysis of the variables in the model were performed.

As in time-series analyses, BIC, AIC, and HQIC criteria are used when determining the lag length. In order to determine the appropriate lag lengths, model selection criteria of $MMSC_{AIC}$, $MMSC_{BIC}$ and $MMSC_{HQIC}$ developed for Panel VAR with the help of the Generalized Method of Moments developed by Andrews and Lu (2001) were used, and the results are shown in Table 11.

Table 11. Panel VAR Model Appropriate Lag Length Results

Number of Lags	MBIC	MAIC	MQIC
1	-451.8325*	-83.37474*	-232.1023*
2	-283.446	-37.8075	-136.9592
3	-142.0803	-19.261	-68.83684

According to the results analyzed with a maximum of 3 lags, 1 lag length in all criteria was deemed appropriate in the estimation of the model. Once the lag length was determined, the Panel VAR model with 1 lag was estimated with the help of GMM. Results of the PVAR model are presented in Table 12 below.

Table 12. Panel VAR Model Estimation Results

	Coefficient	Standard Error	Z Statistic	Probability
ΔLOGSP				
Δ LOGSP(-1)	0.9662357	0.0493162	19.59	0.000
Δ LOGBV(-1)	-0.0708299	0.2052012	-0.355	0.730
Δ DLOGATR(-1)	0.0893598	0.0765408	1.17	0.243
Δ DLOGTA(-1)	-1.847115	0.1860419	-9.93	0.000
Δ DLOGOPM(-1)	0.0411944	0.0352404	1.17	0.242
Δ DLOGFL(-1)	0.7428659	0.0938747	7.91	0.000
ΔLOGBV				
Δ LOGSP(-1)	-0.1244308	0.0137431	-9.05	0.000
Δ LOGBV(-1)	0.5556319	0.0628634	8.84	0.000
Δ DLOGATR(-1)	0.0826531	0.0200912	4.11	0.000
Δ DLOGTA(-1)	-0.320831	0.0405604	-7.91	0.000
Δ DLOGOPM(-1)	-0.0128767	0.0041143	3.13	0.002
Δ DLOGFL(-1)	0.0510858	0.0357507	1.43	0.153
ΔDLOGATR				
Δ LOGSP(-1)	0.0601331	0.0257347	2.34	0.019
Δ LOGBV(-1)	-0.0616089	0.0973262	-0.63	0.527
Δ DLOGATR(-1)	-0.0271456	0.0414684	-0.65	0.513
Δ DLOGTA(-1)	-0.2030327	0.0959701	-2.12	0.034
Δ DLOGOPM(-1)	0.0806624	0.0105589	7.64	0.000
Δ DLOGFL(-1)	0.2522206	0.0591478	4.26	0.000
ΔDLOGTA				
Δ LOGSP(-1)	0.0727337	0.0100182	7.26	0.000
Δ LOGBV(-1)	-0.202931	0.0423474	-4.79	0.000
Δ DLOGATR(-1)	-0.0358743	0.01419	-2.53	0.011
Δ DLOGTA(-1)	0.0437288	0.0273352	1.60	0.110
Δ DLOGOPM(-1)	0.0443803	0.0076125	5.83	0.000
Δ DLOGFL(-1)	0.1837477	0.0244505	7.52	0.000
ΔDLOGOPM				
Δ LOGSP(-1)	-0.0222015	0.0258656	-0.86	0.391
Δ LOGBV(-1)	-0.1154518	0.0970596	-1.19	0.234

Δ DLOGATR(-1)	-0.1651542	0.0434725	-3.80	0.000
Δ DLOGTA(-1)	-0.3522449	0.094457	-3.73	0.000
Δ DLOGOPM(-1)	0.1991759	0.0109539	18.18	0.000
Δ DLOGFL(-1)	0.8615909	0.0881389	9.78	0.000
Δ DLOGFL				
Δ LOGSP(-1)	-.0147979	.0137762	-1.07	0.283
Δ LOGBV(-1)	.0615873	.0508061	1.21	0.225
Δ DLOGATR(-1)	.0323375	.0213328	1.52	0.130
Δ DLOGTA(-1)	-.090754	.0326698	-2.78	0.005
Δ DLOGOPM(-1)	-.0342646	.0125147	-2.74	0.006
Δ DLOGFL(-1)	-.0002497	.05356	-0.00	0.996

* Δ Difference processor

The estimated Panel VAR model needs to be subjected to stability analysis. Eigenvalues of the estimated model below 1 ensure that the characteristic roots of the model are located in the unit circle. The results of the stability analysis are shown in Table 13.

Table 13. Panel VAR Model Stability Analysis - Eigenvalue Results

Eigenvalues		
Real Values	Estimated Values	Fixed Values
0.784306	0.2522003	0.8238573
0.784306	-0.2522003	0.8238573
0.0567468	0.1970523	0.2050605
0.0567468	-0.1970523	0.2050605
0.0276358	0.0385915	0.0474662
0.0276358	-0.0385915	0.0474662

According to Table 13, the eigenvalues of all characteristic roots of the Panel VAR model are below 1. Also, as seen in Figure 1 below, all of the characteristic roots are located in the unit circle.

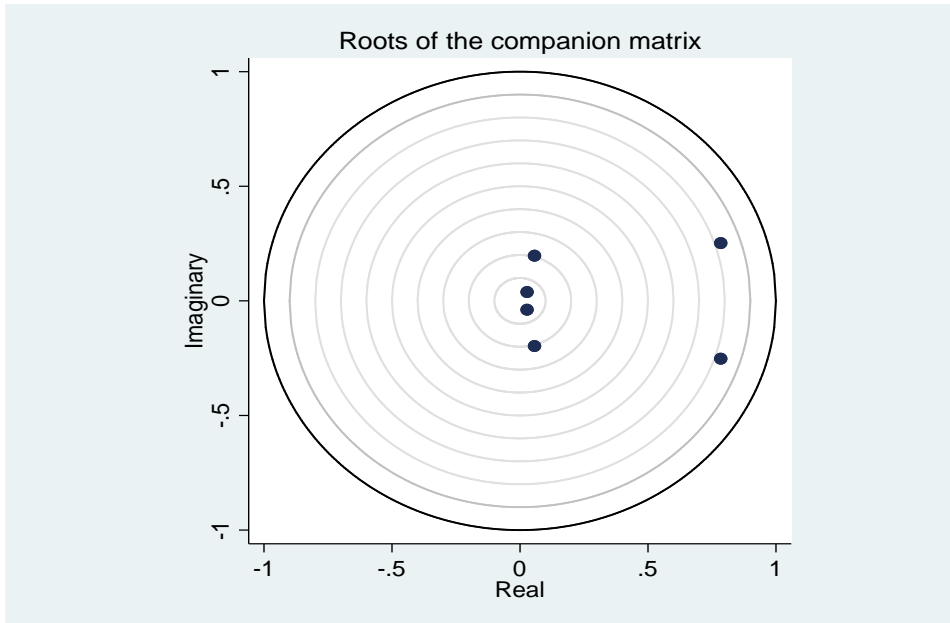


Figure 1. Location of Characteristic Roots in the Unit Circle

The fact that the model passed the stability analysis is important in terms of obtaining the results of impulse-response analysis and variance decomposition. However, the results should be

supported by information about the existence and direction of the relationship between the variables.

Table 14. Panel VAR Causality Results

Variables	χ^2 Value	Probability Value	Decision
$\Delta \text{LOGSP} \rightarrow \Delta \text{LOGBV}$	0.119	0.730	There is no causality
$\Delta \text{LOGBV} \rightarrow \Delta \text{LOGSP}$	81.976	0.000	There is causality
$\Delta \text{LOGSP} \rightarrow \Delta \text{DLOGATR}$	1.363	0.243	There is no causality
$\Delta \text{DLOGATR} \rightarrow \Delta \text{LOGSP}$	5.460	0.019	There is causality
$\Delta \text{LOGSP} \rightarrow \Delta \text{DLOGTA}$	98.575	0.000	There is causality
$\Delta \text{DLOGTA} \rightarrow \Delta \text{LOGSP}$	52.710	0.000	There is causality
$\Delta \text{LOGSP} \rightarrow \Delta \text{DLOGOPM}$	1.366	0.242	There is no causality
$\Delta \text{DLOGOPM} \rightarrow \Delta \text{LOGSP}$	0.737	0.391	There is no causality
$\Delta \text{LOGSP} \rightarrow \Delta \text{DLOGFL}$	62.622	0.000	There is causality
$\Delta \text{DLOGFL} \rightarrow \Delta \text{LOGSP}$	1.154	0.283	There is no causality

Note: Causality results only over the dependent variable LOGSP are included.

According to the causality results above, Beta Value (LOGBV) and Acid-Test Ratio (DLOGATR) were found to be the reason for Stock Prices (LOGSP). A bidirectional causality was found between Total Assets (DLOGTA) and Stock Prices (LOGSP). Panel data analysis yielded a result consistent with the result that the total assets variable has a positive effect on the stock price. In addition, Stock Prices (LOGSP) were found as the reason for Financial Leverage (FL).

The fact that the coefficient interpretations of the dynamic relationships studied in the VAR analysis are not important, reduces the significance of the variables and the importance of their signs. The investigation of dynamic relationships is performed through impulse-response analysis and variance decomposition in conventional VAR analysis. In the panel VAR model, it is investigated how 1 standard deviation shock to one of the estimated random errors affects the current and future values of the other variables considered as internal. Chart 4.1 presents the analyses showing the effects of other variables on each other in the case of 1 standard deviation shocks in the balance of stock prices and internal financial factors (beta value, acid-test ratio, total assets, operating profit margin, financial leverage) in the context of the airline industry.

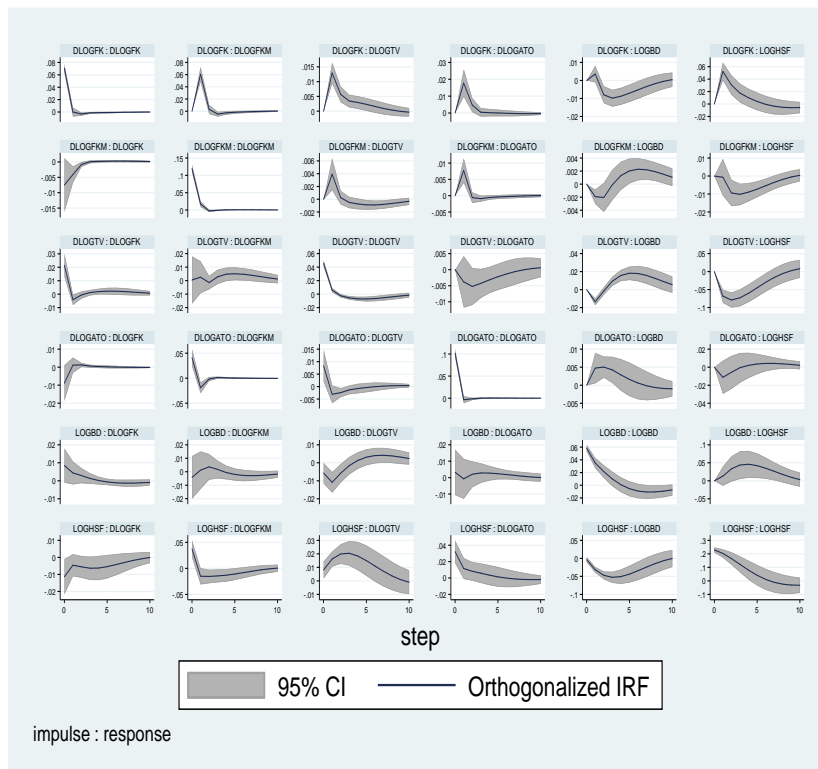


Chart 1. Impulse-Response Analysis Chart

Since the study examines the relationships between stock prices and other variables, the impulse-response analysis of stock prices and other variables is important. Accordingly, as a result of the impulse-response analysis, the relationship between SP and other variables is interpreted in the chart.

Looking at the chart above, LOGSP: LOGSP shows the effect of 1 standard deviation shock to the stock price on the stock price itself. As can be seen from the chart, a 1 standard deviation shock to the stock price negatively affects the stock price itself (this effect is seen until the fifth period and continues, albeit with a decrease, after the fifth period). It is observed that 1 standard deviation shock to stock prices has a negative effect on beta values (LOGSP: LOGBV) until the fifth period and a positive effect after the fifth period. One standard deviation shock to stock prices (LOGSP: DLOGATR) has a sharp negative effect on the liquidity ratio (acid-test ratio) until the first period. After the first period, the negative effect continues by decreasing. It is seen that 1 standard deviation shock (LOGSP: DLOGTA) to stock prices has a positive effect on firm size (total assets) until the third period and then a negative effect. One standard deviation shock (LOGSP: DLOGOPM) to stock prices has a very strong negative effect on profitability (operating profit margin) until the second period. After the second period, a slow positive effect is seen. It is observed that financial leverage ratios (LOGSP: DLOGFL) are almost not affected by 1 standard deviation shock to stock prices.

One standard deviation shock (LOGBV: LOGSP) to beta values has a positive effect on stock prices with little acceleration until the third period and a negative effect with little acceleration with the start of the fourth period. It is observed that the shock to liquidity ratios causes short-term fluctuations in stock prices (DLOGATR: LOGSP). One standard deviation shock to firm size data (DLOGTA: LOGSP) has a strong negative effect on stock prices until the second period and a positive effect after the second period. One standard deviation shock to the operating profitability (DLOGOPM: LOGSP) data has a stable effect until the first period and a negative effect after the first period and until the third period. After the fourth period, a slightly strong positive effect is observed. Finally, 1 standard deviation shock to financial leverage data (DLOGFL: LOGSP) has a strong positive effect on stock prices until the second period. A negative effect is observed after the second period.

In order to support the information obtained by the impulse-response analysis, variance decomposition analysis was performed. Results regarding which variables explain the changes in a variable can be obtained by variance decomposition analysis. Table 15 presents the variance decomposition results.

Table 15. Variance Decomposition Results

Response Variable LOGSP	Impulse Variable					
	LOGSP	LOGBV	DLOGATR	DLOGTA	DLOGOPM	DLOGFL
Period						
0	0	0	0	0	0	0
1	1	0	0	0	0	0
2	0.9245115	0.0016256	0.0012314	0.0456873	0.0000041	0.0269401
3	0.8828977	0.0092507	0.0011455	0.0793964	0.0006443	0.0266655
4	0.851786	0.019918	0.0009857	0.1012786	0.001197	0.0248349
5	0.8280298	0.030692	0.0009411	0.1150895	0.0015771	0.0236706
6	0.8115909	0.0397009	0.0009837	0.1228786	0.0018254	0.0230205
7	0.8019654	0.0459914	0.0010704	0.12628	0.0019634	0.0227294
8	0.7976643	0.0495221	0.0011614	0.126971	0.0020193	0.0226619
9	0.7966596	0.0509374	0.0012315	0.1264472	0.0020272	0.0226972
10	0.7970941	0.0511341	0.001273	0.1257306	0.0020165	0.0227516

In Table 15, variance decomposition was performed for each of the variables, and it was aimed to see the effects of other variables on stock prices. When the effects of variables on the stock price are examined, it can be said once that stock prices, which have 100% explanatory power of their own dynamics in the first period, are the most exogenous variables. In the second period, approximately 92% of the stock prices can be explained by the stock price itself, and 8% by the shocks to the other variables. In other periods, the stock price's explanatory power over itself decreases (80%), and the

variable with the most explanatory power (12%) after it emerges as the total assets variable, which is the indicator of firm size. Panel data analysis yielded a result consistent with the result that the total assets variable positively affects stock prices. According to the end-of-period data, the other variable with the greatest explanatory power (5%) was the beta value. It was observed that the financial leverage variable has an explanatory power of approximately 3% in all periods. Finally, other variables (DLOGATR, DLOGOPM, and DLOGFL) have very little effect on or explanatory power over stock prices.

As a result of the analysis, the relationship between the internal factors and the stock prices of the airlines is explained with the help of figures. This diagram of relationships is shown in Figure 2.

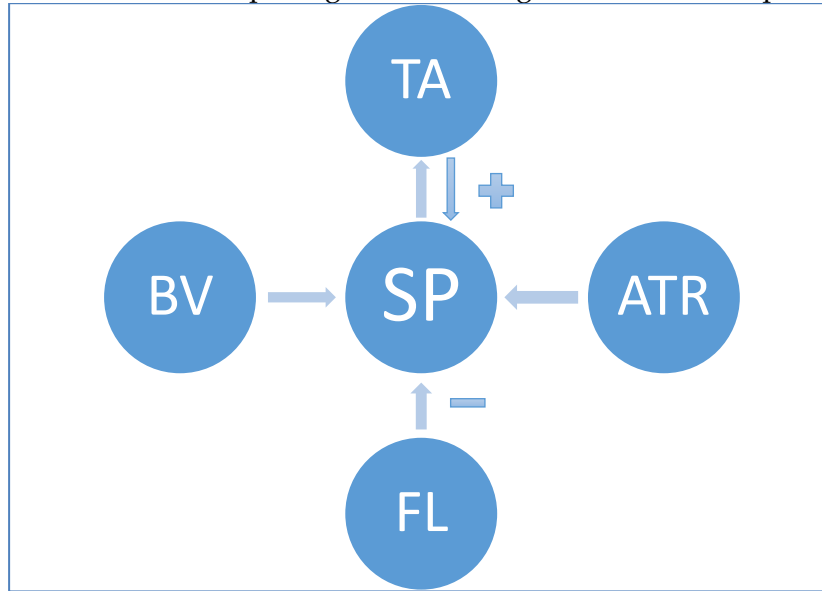


Figure 2. Diagram of Relationships between Internal Factors and Stock Prices of Airlines

In the study, as a result of the Panel data analysis, it was determined that the total assets variable positively affected while the financial leverage variable negatively affected stock prices. The panel VAR Causality results revealed bidirectional causality between the total asset variable and the stock price, and a unidirectional causality between the Beta value and Acid-test ratio variables and the stock price. In this regard, it was determined that TA, FL, BV, and ATR variables are significantly related to the stock price.

In this part of the study, it is aimed to compare the empirical findings obtained as a result of the panel data analysis applied to the 2005-2018 data of the airlines with the study hypothesis. In this context, the sign expectations for independent variables [Beta Value (LOGBV), Liquidity Ratio (DLOGATR), Firm Size (DLOGTA), Profitability (DLOGOPM), and Financial Leverage (DLOGFL)] and the findings obtained as a result of the empirical analysis were compared. Table 16 below presents the findings and sign expectations obtained from the analysis.

Table 16. Comparison of Theoretical Expectations and Findings

Measurement Indicator	Hypothesis	Findings
LOGBV	-	No relationship
DLOGATR	+	No relationship
DLOGTA	+	+
DLOGOPM	+	No relationship
DLOGFL	-	-

Accordingly, as a result of the analysis of the data obtained from the airlines in the sample, it is seen that the total assets (DLOGTA) variable showing the size of the firm is compatible with the hypothesis. In other words, increases in the total assets of airlines affect their stock prices positively.

As a result of the analysis, it is seen that the financial leverage variable showing the financial structure is compatible with the hypothesis. It is concluded that the other variables (LOGBV, DLOGATR, and DLOGOPM) have an insignificant relationship with the stock price.

According to the panel VAR causality analysis, Beta Value (LOGBV) and Acid-Test Ratio (DLOGATR) were found to be the reason for Stock Prices (LOGSP). A bidirectional causality was found between Total Assets (DLOGTA) and Stock Prices (LOGSP). The result of the panel data analysis that the total assets variable has a positive effect on the stock price is consistent with the Panel VAR causality analysis result.

Conclusion and Discussion

Airline businesses are remarkably sensitive to all systematic and unsystematic risks. Because the operational and financial risks of airlines are very high. Therefore, it is extremely important to determine the factors that affect the stock prices of airline businesses. In order to reveal these factors; Its use in testing the financial performance of airline businesses contributes to the examination of the financial statements in the context of systematic risk and enables the changes in the said statements to be explained. Meanwhile, in the context of unsystematic risk are described the effects of changes arising from macroeconomic factors on stock prices. In other words, determining which variables are effective in the change in the stock prices of airline businesses is important in terms of performance evaluation of airline businesses.

In the study, internal financial factors affecting the stock prices of airline businesses are examined. In this context, the relation between the stock prices of airline businesses and internal factors such as TA, ATR, OPM, FL and BV has been analysed by Panel data and Panel VAR methods.

As a result of the panel data analysis on internal factors, it was determined that the total assets (TA) variable has a positive effect on stock prices, while the financial leverage (FC) variable has a negative impact.

According to the panel VAR Causality results, bidirectional causality was determined between the total asset variable and the stock price; one-way causality between the beta value (BV) and acid-test ratio (ATR) variables and the stock price. In this framework, the significant relationships of TV, FK, ATO and BD variables with the stock price were determined. As a result of all analyzes (panel data, causality, impulse-response and variance decomposition), the TA variable, which is one of the indicators of firm size in airline businesses, has been found to be strongly related (+) to the stock price of airline businesses. Thus, airline businesses should increase the size of the firm as much as possible to maximize the value of the stock.

This result illustrates that airline businesses display adequate performance in terms of stock value by taking advantage of economies of scale. Airline businesses that benefit from economies of scale provide a competitive advantage by showing lower costs and higher efficiency compared to rival airline businesses. Therefore, the advantage of competitive will positively affect the performance criteria of airline businesses (profitability, stock value, etc.).

The negative effect of the FL variable, which is an indicator of the capital efficiency of airline businesses, on the stock price is concluded as expected in the hypothesis. Accordingly, it has been determined that airline businesses with high debt financing affect the stock value negatively. One of the most important reasons that increase financial leverage in airline businesses is the increase in costs. At this point, it may be an effective way for airlines to reduce operational costs. Oil cost is one of the biggest factors in airline cost control. There are two ways to decrease fuel costs. Firstly, airlines can optimize fuel costs with their hedging strategies. For instance, Southwest airlines maintained about 70% of their fuel consumption at a cost of \$ 51 a barrel in 2008, while the market price of oil was around \$ 100. Thus, Southwest continued to maintain its profitability without being affected by the 2008 crisis (Pyke and Sibdari, 2018, p.198).

Another way to reduce cost is that airlines can reduce fuel costs by having new fuel-saving aircraft. For example, Air France-KLM stated that as a result of the replacement of Boeing 747-300 aircraft with Boeing 747-300ER aircraft, fuel costs decreased by 26% (Lee and Jang, 2007, p. 440).

In addition, airlines must control high labour costs. However, it is often becoming impossible for airline businesses to reduce labour costs. Compared to other industries, airline work takes on a high level of skill and responsibility (O'Connor, 2001, p.81). Therefore, costs could be increased by compress personnel wages. However, due to syndicate activities, operational and personnel costs of airline businesses are also increasing. All these difficulties make it difficult for airline businesses to control personnel costs. Airline businesses struggle with high-interest expenses while providing high debt financing. Airlines may experience liquidity congestion while meeting high-interest expenses and may not be able to fulfil short-term obligations like bank loans. In this case, airlines may face the risk of bankruptcy by experiencing a liquidity shortage. Airlines can raise capital through internal financing (auto financing) (increasing their revenues and/or reducing costs) or by offering stocks instead of external borrowing (which can have a negative impact on financial leverage). Thus, the financial leverage will decrease and the stock will gain value accordingly.

According to the panel VAR causality analysis, it was determined that the ATR variable, which is one of the liquidity indicators of airline businesses, is the cause of the stock price. Accordingly, it has been observed that the short-term cash flows (working capital) of airline businesses affect the stock value. Airline businesses can increase operating performance and stock value through well-designed cash flow planning and working capital. It is claimed that an enterprise with an ATR rate of less than 1 cannot repay its current obligations and may face bankruptcy. For the airline industry, the average liquidity proportion is 0.90, and several airline businesses are below this value (Lee and Hooy, 2012, p.33). The average ATO rate of the airline businesses (28 airline businesses) in the sample is lower than the industry average and is 0.73. Based on these data, it can be said that the ability of airline businesses to pay their short-term debts is low.

Airline businesses experience difficulties in terms of cash flow at some periods of the year, as they operate in high seasonal and cyclical operating environments.

During these periods, airlines can be exposed to short-term liquidity risk (Moody's-Passenger Airline Industry, 2018, p.18). As stated above, in cases where there is liquidity risk, airlines should prefer internal financing (auto financing) by increasing revenues rather than providing cash through external borrowing.

Alternatively, cash can be provided by issuing stocks. However, financing by stock supply is not preferred for short-term liabilities. Accordingly, one of the ways to obtain save of the liquidity crunch is to increase the revenues of airline businesses. In this way, it is thought that the good liquidity status of the airline businesses will contribute positively to the stock value.

According to the panel VAR causality analysis, it was determined that the BV variable, which is the systematic risk indicator, is the cause of the stock price. There are two views in the literature for the measure of systematic risk. Firstly, in the context of the risk-return relationship, it has been argued that stocks with high risk will have high profits and the risk positively affects stock prices.

Particularly risk-prone investors prefer stocks which are high risk to earn higher returns. The second idea is, it is argued that businesses with high systematic risk may have a loss or bankruptcy and adversely affect the stock value. As a result of the perspective, it was determined that BV is associated with the stock price, but it has not been found to have a positive or negative impact. According to the relationship between BV and SP, airlines should not ignore the BV effect. In order to pro-risk investors, the high BD of airlines businesses could be preferable.

According to the results of panel data analysis and causality analysis, no significant relationship was found between the OPM variable, one of the profitability indicators of airline businesses, and the stock price. It is thought that profitability, which is one of the basic indicators measuring business performance has a positive impact on stock value in theory. However, the sample made with airline businesses was determined that the profitability variable (OPM) does not affect the stock price. This result, it can be said that unlike the profitability of airline businesses, there are more significant internal factors affecting the stock value. In this study, other variables which, are TA, FL, ATR, and BV were found to be more important.

To sum up, according to all the findings of the study; Airline businesses can increase their share value by taking advantage of the economics of scale, optimizing the liquidity position, and taking into account the negative impact of financial leverage, in order to increase stock value.

It is thought that the findings obtained as a result of the study will contribute to determining the factors affecting the stock prices of airline businesses, determining the variables that determine investment decisions and stock prices. In addition, it is thought that by bringing new solutions to these businesses in terms of maximizing stock prices, it will contribute positively to the financial performance of airline businesses.

The study has some limitations that will affect the research results. The first is that the research sample is limited. Another constraint is the frequency and duration of the statistical data used in the study. Another restriction is the limited number of independent variables. It is thought that in the future carrying more frequent and long-term study with more examples for airline operations and variables studies will produce more accurate results.

References

- Anderson, R., Hailong Q. and Robert R. (2006). Analysis of Panel Vector Error Correction Models Using Maximum Likelihood, the Bootstrap and Canonical- Correlation Estimators. *Research Division Federal Reserve Bank of St. Louis Working Paper Series*,
- Arkan, T. (2016). The importance of financial ratios in predicting stock price trends: A case study in emerging markets. *Finanse, Rynki Finansowe, Ubezpieczenia*, 1/2016, Volume 79, 13-26.
- Aydemir, O., Ögel S. ve Demirtaş, G. (2012). Hisse senedi fiyatlarının belirlenmesinde finansal oranların rolü. *Yönetim ve Ekonomi Dergisi*, Cilt 19 (2), 277-288.
- Cook, G. N. and Billig, B. G., (2017). *Airline Operations and Management – A Management Textbok*. Routledge, Newyork.
- Güriş, S. (2015). *Panel Veri ve Panel Veri Modelleri. Kolektif içinde, Modelleri, Stata İle Panel Veri*. İstanbul: Der Yayınları.
- Hooy, C. And Lee, C. (2010) The determinants of systematic risk exposures of airline industry in Est Asia. *World Applied Science Journal*, Volume 10, 91-98.
- Hung, J-H. And Liu Y-C. (2005) An examination of factors influencing airline beta values. *Journal of Air Transport Management*, 11 (2005) 291-296.
- Hsiao, C. (2003). *Analysis of Panel Data* (Second edition b.). Cambridge: Cambridge University Press.
- Küçük Yılmaz, A. (2016). Hava taşımacılığının yapısı. A. Küçük Yılmaz (Editör), *Hava taşımacılığı içinde* (s.28-50). Eskişehir: Anadolu Üniversitesi Açıköğretim Yayınları.
- Lee, C-H., Hooy, C-W. (2012). Determinants of systematic financial risk exposures of airlines in North America, Europe and Asia. *Journal of Air Transport Management*, Volume 24, 31-35.
- Lee, J and Jang, S. (2007). The systematic-risk determinants of the US airline industry. *Tourism Management*, Volume 28, 434-442.
- Liu, Y-C. And Hung, J-H. (2005). An examination of factors influencing airline beta values. *Journal of Air Transport Management*, Volume 11. 291-296.
- Love, I. and Lea Z. (2006) Financial Development and Dynamic Investment Behavior: Evidence from Panel VAR. *The Quarterly Review of Economics and Finance*. Vol. 46, ss.190-210.
- Moodys (2018). *Passenger Airline Industry*. Rating Report. (available online at: https://www.moodys.com/researchdocumentcontentpage.aspx?docid=PBC_1091811 Retrieved on December 10,2019)
- O'Connor, W. E. (2001). *An Introduction to Airline Economics*. Sixth Edition. Praeger Publishers, ABD.
- Padachi, K. (2006), Trends in Working Capital Management and its Impact on Firms' Performance: An Analysis of Mauritian Small Manufacturing Firms. *International Review of Business Research Papers*, Vol.2 No. 2. October 2006, Pp. 45 -58.
- Sevüktekin, M. ve Nargeleçekenler, M. (2010). *Ekonometrik Zaman Serileri Analizi*. 3.Basım, Ankara: Nobel Yayınları.
- Türküz, E. (2016). *Panel Vektör Otoregresif Modeller ve Bir Uygulama*. Yayımlanmamış Yüksek Lisans Tezi, Marmara Üniversitesi Sosyal Bilimler Enstitüsü, İstanbul.

-
- Tetik, N. Ve Uğur, A. (2010), Beta Katsayısının Tahmininde Getiri Aralığının Sektörler İtibariyle Analizi: İMKB’de Bir Araştırma, *Atatürk Üniversitesi İktisadi ve İdari Bilimler Dergisi*, Cilt: 24, Sayı: 1. 15-24.
- Standart and Poors (2010). *Key Credit Factors: Criteria For Rating The Airline Industry*. Report., (available online at: <https://www.maalot.co.il/publications/mt20120322152358.pdf> Retrieved on December 10,2019).
- Vasigh B. Fleming K. ve Humphreys, B. (2015). *Foundations of Airline Finance – Methodology and practice*. Second edition. Routledge. ABD.
- Vasigh B. Fleming, K. ve Tacker, T. (2013). *Introduction to Air Transport Economics- From Theory to Applications*. Second Edition. Ashgate Publishing Limited. England.
- Yerdelen Tatoğlu, F. (2018). *Panel Zaman Serileri Analizi*. İstanbul: Beta Basım Yayınları.

Preparation and Volunteering Level Determination for CBRN: The Case of Gümüşhane Province

KBRN İçin Hazırlılık ve Gönüllülük Düzeyi Belirleme Çalışması: Gümüşhane İli Örneği

Abstract

The term CBRN refers to situations that are harmful and dangerous for humans and the environment caused by the deliberate or accidental spread of chemical, biological, radioactive, nuclear materials. CBRN agents used as weapons of mass destruction since ancient times; As a result of being active in the wars that have been going on for a long time and the development of weapon technology, it has been an extremely deterrent force for the countries of the world and terrorist organizations. These agents, which may cause harm to living things, the environment, even future generations, are important risk factors for each of us. Health teams and all organizations involved in rescue operations are expected to be ready for these agents to respond to any CBRN exposure. In this study; the risk perceived by the health workers and university students associated with CBRN during emergency preparedness, rescue, readiness to respond to a CBRN event were investigated. As a result, the perceived risk (3.71) in a five-point Likert rating was found to be slightly higher than willingness-volunteering (3.41) and use of personal protective equipment (3.36). It was concluded that people who are expected to participate in the CBRN intervention team should receive CBRN training and that their expected use of personal protective equipment and volunteerism should be increased.

Öz

Eski zamanlardan günümüze kadar kitle imha silahı olarak kullanılan KBRN (Kimyasal, Biyolojik, Radyolojik ve Nükleer) ajanları; uzun süre devam eden savaşlarda etkin olması ve silah teknolojisinin gelişmesi sonucunda dünya ülkeleri ve terör örgütleri için son derece caydırıcı bir güç unsuru olmuştur. Canlılara, çevreye ve hatta gelecek nesillere zararları olabilecek bu ajanlar her birimiz için önemli risk unsurudur. Herhangi bir KBRN maruziyetine karşı olaya müdahale edecek sağlık ekipleri ve kurtarma operasyonunda yer alabilecek tüm organizasyonların bu ajanlara hazır olması beklenmektedir. Bu çalışmada; bir KBRN olayı için acil yardım, kurtarma ve müdahaleye hazır oluşluk aşamasında KBRN ile ilişkilendirilen Gümüşhane İli sağlık çalışanları ve üniversite öğrencilerinin algıladığı risk, kişisel koruyucu ekipman kullanımı, istek- gönüllülükleri araştırılmıştır. Sonuç olarak beşli likert derecelendirilmesinde algılanan riskin (3, 71), istek-gönüllülükten (3, 41) ve kişisel koruyucu ekipman kullanımından (3, 36) az da olsa daha yüksek olduğu görüldü. KBRN müdahale ekibinde yer alması beklenen kişilerin KBRN eğitimleri alması ve bu doğrultuda beklenen kişisel koruyucu ekipman kullanımı ve gönüllülüklerinin artması gerektiği kanaatine varılmıştır.

Introduction

Using Chemical, Biological, Radiological and Nuclear (CBRN) agents, it has been aimed to reduce the combat power of the enemy, especially wars, conflicts, riots, terrorist and dictator actions, poisoning and executions, to make the enemy ineffective, to haunt the enemy and to break the resistance of the enemy (Sezigen, 2009).

Weapons of Mass Destruction (WMD); It has four different formats: Chemical, Biological, Radiological and Nuclear (CBRN), and refers to all kinds of equipment (ballistic missiles, airplanes, long-range cannons, letter envelopes, etc.) used to carry and launch them, as well as non-conventional weapons. CBRN agents have been named "Weapons of Mass Destruction" because

Gülşah Ayvazoğlu

Lecturer, Hatay Mustafa Kemal
University, gulsahayvazoglu@mku.edu.tr
Orcid: 0000-0003-0830-4570

Sevil Cengiz

Assistant Professor, Gümüşhane
University, sevil_cengiz@yahoo.com,
Orcid: 0000-0002-3562-1793

Article Type / Makale Türü

Research Article / Araştırma Makalesi

Anahtar Kelimeler

KBRN 1, Kitle İmha Silahları 2, Müdahale 3

Keywords

CBRN 1, Weapons of Mass Destruction 2,
Intervention 3.

Bilgilendirme

This article has been derived from the master
thesis of Gülşah Ayvazoğlu in the
management of Sevil Cengiz.

Submitted: 15 / 12 / 2020

Accepted: 31 / 12 / 2020

they have more lethal effects than conventional weapons. Conventional weapons are clearly distinguished from WMD with their destructive potential and deterrence nature resulting from this feature (Kiremitçi, 2014). Besides, the term CBRN; CBRN substances; It is also defined as the process of spreading by intent, accidental or natural disasters, and the occurrence of effects that harm humans and the environment (MEB, 2011; AFAD, 2014). The term HAZMAT (hazardous materials) is used for the accidental release of a hazardous substance or exposure to toxic industrial material (Calder & Bland, 2018).

In the study on "Transforming Defense, National Security in the 21st Century" conducted in the United States of America in 1997; it is expressed as "Weapons of Mass Destruction, generally chemical, biological, nuclear weapons and missiles capable of carrying them. In some cases, it includes radiological weapons". The use of weapons of mass destruction or the threat of using mass destruction weapons are weapons that can cause pollution, causing a change in the objectives, phase, and direction of operation of the operation with a large amount of casualties (Erdurmaz, 2003; IAEA & WHO, 1996).

The use of CBRN substances is very common, especially in the energy sector and in the health field, but these substances can pose significant risks for living things even when used on behalf of humanity. In particular, chemicals used and stored in industry, flammable and explosive materials, and nuclear power plants, although their use is to help and serve humanity, accidents and carelessness can result in major disasters (Sezigen, 2009). In addition to all these negative reasons, their usage areas for humanity, especially in the medicine and energy sector, have led to the acceptance of these agents in today's world. In addition to all these negative reasons, their usage areas for humanity, especially in the medicine and energy sector, have led to the acceptance of these agents in today's world.

Although CBRN agents have different properties in themselves; capable of causing maximum damage to the opposing enemy, causing turmoil, intimidation, or destruction during a war or conflict; high toxicity, colorless, odorless, heavier than air, its structure does not easily deteriorate, not held by masks, Resistant to air, water, chemicals, the mode of action, prevention and treatment methods are unknown, easy and cheap productions, weapons used and carried with necessary precautions. CBRN agents each have different effects and properties. Usage areas, purposes, ways of action, if any, protection methods differ.

CBRN events leave long and deep painful scars beyond the normal range of human experience. The common feature among CBRN events is 'contamination' and 'lethality' that require special preparation in terms of increased awareness, use of personal protective equipment, detectors, decontamination assistance, and special medical support measures. Such events result in a larger population in situations of panic and fear and affect their morale (Sharma, 2010).

There is little evidence of optimal management of CBRN events, but any intervention should be based on proven traditional concepts. Inter-agency and international understanding and communication are essential to optimize response and increase capability and capacity. Studies, which include the development of clear doctrine and standard operating procedures, and then the implementation of response scenarios by all response teams, are critical to achieving readiness (Holdsworth et al., 2012).

Management of mass casualty incidents due to covert attacks involving CBRN agents or man-made accidents involving them requires general preparedness and risk reduction at all levels, including the development of an effective response mechanism. For this, contingency planning, capacity building in terms of providing basic infrastructure, trained human resources, equipment, development of coordination, implementation mechanisms are required (Bhardwaj et al., 2010).

It is understood that there are CBRN events in most of the events requiring crisis management, therefore, crisis centers to be established will have to deal with several crises (for example, both natural disasters and CBRN events caused by the disaster). To manage the conditions in the event of exposure to CBRN agents, a comprehensive knowledge and analysis capability of these agents is required. In this study, Gümüşhane and Kelkit State Hospital healthcare professionals who will intervene in any CBRN incident and Gümüşhane University students who are expected to take part

in the intervention phase in their professional lives, as a result of the findings obtained by conducting a questionnaire: Determining volunteerism levels and knowledge, it was aimed to correctly evaluate and interpret the expectations and results in this regard.

1. Method

In the event of a possible CBRN agent exposure; It is expected that health personnel and field students who will intervene in professional life will be equipped with CBRN. In this study, the perceived risk, personal protective equipment usage, volunteering levels of the CBRN team were studied.

The study was applied to a sample group which was determined by a random sampling method among the Gümüşhane State Hospital, Gümüşhane-Kelkit State Hospital Medical Staff, Gümüşhane University Students (Nursing, First and Emergency Aid, Emergency Aid and Disaster Management, Occupational Health and Safety Departments). The sample of this descriptive and inferential study was composed of 540 people between 02 March and 20 March 2015. The data of 130 questionnaires were filled out and 410 questionnaires were analyzed.

When the survey questions preparing, literature research had been searched (MEB, 2011; Belli, 2014; Stevens et al., 2010). Survey reliability was provided with Cronbach's alpha ($\alpha=0.917$). Face validity was provided by asking 10 academics.

In the questionnaire, firstly information about the purpose and scope of the research was given. In the second part, questions related to demographic characteristics and questions about whether CBRN training was taken were asked. There are 15 questions.

Participants were asked to respond to each statement by their views. The options used in the scale were arranged according to the Likert-type five-point rating. SPSS 17 package program was used for data analysis.

All participants who attend the survey gave answers according to their ideas and their own. Options that are used at analysis were arranged according to the Likert style (5 degrees). When the data was analyzing, SPSS 17 pocket program was used.

The suitability of the data obtained with the measurement of the normal distribution was examined in each group by the Kolmogorov Smirnov test. The arithmetic mean and standard deviation were evaluated by number, mean, percentage. Student's t-test using gender, institution, marital status, One-way ANOVA test was used to evaluate age, educational status, income level.

2. Results

The questionnaire was applied to 410 students from Gümüşhane State Hospital, Gümüşhane - Kelkit State Hospital, Gümüşhane University. Of the 410 participants, 270 were female (65.9%) and 140 were male (34.1%). Considering the marital status of the participants, it was found that 51 people were married (12.4%) and 359 people were single (87.6%). When the age groups of the participants were taken into consideration, it was found that 345 people were in the 18-25 age range (84.1%), 43 people were in the 26-34 age range (10.5%), 20 people were in the 35-45 age range (4%, 9%)., 2 people were in the 46-55 age range (0.5%), and lastly, 1 person was in the 56-year-old range (0.5%). 410 people participated in the study, 26 high school (6.3%), 232 associate degree (56.6%), 126 undergraduates (30.7%), 15 graduate (3.7%), 11 doctorates (2.7%).

Considering the institution and student status of 410 people, 103 people (25%, 1) worked in hospitals and 307 people (74.9%) were university students.

Considering the working years or student years of 410 participants, 338 people (82.4%) were 1-2 years, 43 people (10.5%) were 3-4 years, 10 people (2.4%) 5-6 years, 4 people (1%) work for 7-8 years, 15 people (3.7%) work for 9 years and over.

Besides, 175 people (42.7%) of 410 people participated in the study received CBRN training, 235 people (57.3%) did not receive CBRN training. 4 out of 175 people who received CBRN training (1%) During the course organized by national education, 3 people (0.7%) During military training, 3 people (0.7%) In a training given by a private institution, 125 people (30.5%) 39 people (9.5%) received CBRN training from other institutions during university education. Analysis of variance

(two related tests) was performed by independent groups. In the Paired Sample T-Test analysis; In the table, the perceived risk is higher than the use of personal protective equipment and willingness. However, to determine whether this difference is a coincidence or a real success indicator, when looking at the Paired Samples Test table, The Sig.value is = 0.001

Table 1. Paired Samples Statistics of Perceived Risk, PPE, Willingness-Volunteering

	Mean	N	Std. Deviation	Std. Error Mean	Min	Max
Pair 1 Perceived Risk	3.7123	409	0.78746	0.03894	1.00	6.00
Pair 2 PPE	3.3564	409	0.67936	0.03359	1.00	5.69
Pair 3 Willingness-Volunteering	3.4128	410	0.76338	0.03770	1.00	6.33

The difference between perceived risk and the use of personal protective equipment was statistically significant at $p < 0.05$. There is no significant difference between perceived risk and willingness and voluntariness, and the difference between personal protective equipment and willingness to volunteer is at $p > 0.05$.

Table 2. Paired Samples Correlations of Perceived Risk, PPE, Willingness-Volunteering

	N	Correlation	Sig.	Mean	Std.D.	t	Sig. (2-tailed)
Pair 1 Perceived Risk & PPE	409	0.311	0.001	0.35590	0.86514	8.320	0.001
Pair 2 PPE & Willingness-Volunteering	409	0.326	0.001	-0.05533	0.84076	-1.331	0.184
Pair 3 Willingness-Volunteering & Perceived Risk	410	0.328	0.001	-0.29854	0.89874		-6.726

The perceived risk in CBRN events, the use of personal protective equipment, and whether there was a statistically significant relationship between willingness and willingness were evaluated using the K Related test. Arithmetic averages are taken; perceived risk, use of personal protective equipment, and willingness to volunteer. ($p < 0.05$).

Table 3. Correlation NPar Test Descriptive Statistics

	N	Mean	Std. Deviation
Perceived Risk	409	3.7123	0.78746
PPE	409	3.3564	0.67936
Willingness-Volunteering	409	3.4117	0.76399

Confirmatory factor analysis (standardized regression coefficients) to find the relationship between perceived risk and use of personal protective equipment and willingness to volunteer showed a weak positive relationship.

Table 4. Non-Standardized Regression Coefficients

	Est.	Std. Error	Critical Value	Sig. Level
Perceived Risk → PPE	0.265	0.056	4.733	0.001
Perceived Risk → Willingness-Volunteering	0.262	0.050	5.273	0.001

Discussion

CBRN threat; CBRN substances are deliberately spread by accident or natural disasters, resulting in harmful effects on humans and the environment. When we look at the literature, there are many studies on CBRN agents, there are different definitions among them, and although they are different in many ways, when we look at their use purposes and effects, it has been observed that it continues to exist from past to present with WMD. Since the ancient times of history, chemical and biological agents have been used with various information about the use of different methods, with the development of technology diversified radioactive resources and nuclear weapons have become uncontrollable WMDs.

The two major world wars and the subsequent cold war period led to the brutal use, storage, technological development of CBRN agents. With the end of the Cold War, the whole world has been focusing on the CBRN agents, which are crucial forces to be ready for possible war scenarios (Özgür, 2006).

When studies on CBRN agents are examined; It has been observed that there is literature information that can be reproduced as CBRN agents, their characteristics, application areas, mechanisms of action, protection from CBRN agents, decontamination methods, emergency and hospital plans for CBRN.

Since the ambulance team and hospital emergency services will be the first responders to the people exposed to CBRN agents, in such unusual situations, the capacity and facilities of the emergency services where rapid action can save lives are increased; plans are needed to ensure the safety of patients and staff (Balicer et al., 2006).

In 2003, as a result of a study which included 500 hospitals in the USA and examined the preparations of the hospitals for mass injuries, 97.3% of the hospitals were examined for natural disasters, 85.5% for chemical incidents, 84% and 8% for bioterrorist attacks, has a plan for nuclear or radiological events (Niska & Burt, 2005).

In 2006, the study in the US state of Mississippi revealed that 89.2% of state hospitals had written intervention plans, 75.7% had decontamination units, and 91.9% of hospitals were unable to identify and recognize CBRN agents (Bennett, 2006).

Higgins et al.; In a study conducted with the participation of 116 hospitals in Kentucky, USA, in 2002, it was determined that hospitals were generally prepared in areas such as admission, triage, diagnosis, treatment, evacuation of the wounded, but they were not equally prepared for the detection, decontamination, treatment of CBRN injured (Higgins et al., 2004).

Sixty-six contaminated casualties were admitted to St Luke's hospital following a terrorist attack on March 20, 1995, in which the sarcophagus was used on the Tokyo subway. 23% of hospital personnel who intervened in the wounded were exposed to secondary contamination. Similarly, 135 (9.9%) of 1363 emergency medical technicians who intervened CBRN casualties at the scene were exposed to secondary contamination and received treatment (Okumura et al., 2005).

In addition to the studies in which hospitals and hospital staff were affected by CBRN incidents and institutions were shown to be ready for such studies, CBRN incidents and their effects were also studied. Kim-Farley et al.; They used the HICS system in their planning to intervene in a bioterrorist attack that could be accomplished by the use of smallpox virus, a biological warfare agent of the category "A" and they were able to provide a more organized, rational and systematic response to operate command, control, coordination activities (Kim-Farley et al., 2003).

In 2009, Sezigen created a behavioral model that could be applied by TSK Military Hospitals to demonstrate effective intervention in CBRN-induced mass injuries, the organizational structure required in military hospitals, minimum facilities and capabilities, standards for institutional coordination and training, and intervention principles (Sezigen, 2009).

Studies conducted in 2006 have shown that most healthcare workers who are critical to emergencies, terrorist attacks, natural disasters, or events affecting public health, such as the epidemic, are reluctant to work (Balicer et al., 2006).

A survey of 136 EMTs and health workers in Monmouth County, New Jersey in 2014 showed no significant difference in perceived risk, but lack of knowledge of CBRN led to a low level of volunteerism and an urgent need to respond (Belli, 2014).

Studies have shown that there is not enough information and experience on CBRN and that all organizations that will intervene in the event should be supported with training. The necessity of preparing CBRN preparation and response plans has been demonstrated by exposure to incident response teams.

The study aims are to determine the perceived risk of employees who intervene in the CBRN case, their use of personal protective equipment, willingness to combat CBRN agents because of their importance in emergency and disaster management, the lack of studies on this issue.

The questionnaire was applied to 410 people who were working as a result of the literature search for the health personnel of Gümüşhane State Hospital, Kelkit State Hospital, Gümüşhane University Students (Nursing, Paramedic, Emergency and Disaster Management, Occupational Health and Safety Departments).

In light of the results, the perceived risk (3.71) is higher than the willingness-volunteer (3.41) and personal protective equipment use (3.36). Multiple regression analysis was performed between perception level, willingness, willingness to use personal protective equipment evaluated by a 5-point Likert method, a weak positive relationship was observed between them.

When the demographic findings were evaluated, it was observed that there was no statistically significant difference in perceived risk and willingness. In terms of the use of personal protective equipment, women, married, long-term employees; It was observed that they were more sensitive than male, single and short-term working individuals and there was a statistical difference between them.

There was no statistically significant difference between educational status and willingness. The perceived risk and personal protective equipment use of associate degree graduates and students were found to be higher than the undergraduate and graduate graduates and students, and there was a statistical difference between them. When the level of knowledge is examined, it is found that associate degree and master's degree is more equipped than the degree. These results showed that CBRN training requires continuity and the importance of regular training, exercises, awareness-raising activities against these threats.

The tendency towards CBRN weapons is pushing countries to look for ways to protect themselves from these agents. KBRN weapons designed for use must always be equipped against weapons. Countries should develop state policy on this issue and the necessary training and preparations should be carried out in a controlled manner to raise public awareness (Kılıç, 2006).

Conclusion

CBRN agents are important risk factors for both the use of WMD and their beneficial use for both communities and the environment and countries should be prepared for these agents. These agents, which can result in disasters, can have unpredictable consequences.

The possibility of a combination of terrorism and weapons of mass destruction is evident in today's world. In addition to the measures to be taken against countries with defense systems and CBRN agents, all organizations involved in the health sector and the intervention phase should be prepared for these dangerous agents at any time and ensure that different disciplines work together effectively. In CBRN exposure, public, private sector, non-governmental organizations, individuals should support the process by performing their duties on a human and professional basis. Health institutions and organizations involved in the intervention phase are exposed to disasters due to their purpose and service areas. They must have the necessary training and equipment to manage CBRN-containing disaster health. In this study aimed to determine the perception levels, use of personal protective equipment, the willingness of knowledge of health personnel and individuals who are expected to be included in the intervention team to intervene CBRN agents, this survey aimed to determine knowledge level in Gümüşhane province was slightly higher than the willingness and willingness and personal protective equipment usage seen. Besides, it was observed that the survey participants had more information about nuclear agents, then biological agents, radiological agents, finally chemical agents.

References

- Sezigen, S. (2009). Sağlık Kurumlarında Kitlesel NBC (KBRN) Yaralanmalarına Yönelik Davranış Modelinin Oluşturulması, Yayınlanmamış Doktora Tezi, Gülhane Askeri Tıp Akademisi Komutanlığı Sağlık Bilimleri Enstitüsü, Ankara.
- Kiremitçi, İ. (2014). Küresel Boyutta Biyolojik Terör Tehdidi. *Savunma Bilimleri Dergisi*, 13(2), 27-58.

-
- T.C. Milli Eđitim Bakanlıđı, (MEB). (2011), Acil Sađlık Hizmetleri Kimyasal Biyolojik Radyasyon ve Nükleer (KBRN) Tehlikelerde Acil Yardım. Eriřim adresi: [http://megep.meb.gov.tr/mte_program_modul/moduller_pdf/Kimyasal,%20Biyolojik,%20Radyasyon%20ve%20N%C3%BCkleer%20\(kbrn\)%20Tehlikelerde%20Acil%20Yard%C4%B1m.pdf](http://megep.meb.gov.tr/mte_program_modul/moduller_pdf/Kimyasal,%20Biyolojik,%20Radyasyon%20ve%20N%C3%BCkleer%20(kbrn)%20Tehlikelerde%20Acil%20Yard%C4%B1m.pdf). (06/04/2020)
- Afet ve Acil Durum Yönetim Başkanlıđı. (AFAD), (2014), KBRN Sözlüğü, <https://www.afad.gov.tr/kbrn-sozlugu>. (16/02/2020)
- Calder, A., & Bland, S. (2018). CBRN considerations in a major incident. *Surgery (Oxford)*, 36(8), 417-423.
- Erdurmaz, A. S. (2003), Orta Dođu'daki kitle imha silahları, silahların kontrolü ve Türkiye, Ankara: Ümit Yayıncılık.
- International Atomic Energy Agency & World Health Organization. (1996), International basic safety standards for protection against ionizing radiation and for the safety of radiation sources. Vienna: International Atomic Energy Agency.
- Sharma, R. K. (2010). Chemical, biological, radiological, and nuclear disasters: Pitfalls and perils. *Journal of pharmacy and bioallied sciences*, 2(3), 155.
- Holdsworth, D., Bland, S., & O'Reilly, D. (2012). CBRN response and the future. *BMJ Military Health*, 158(1), 58-63.
- Bhardwaj, L. G. J. (2010). Chemical, biological, radiological, and nuclear disaster management. *Journal of pharmacy and bioallied sciences*, 2(3), 157
- Belli, A. F. (2014). EMS Willingness to Respond to a Chemical, Biological, Radiological, and Nuclear Event, The doctoral dissertation, Walden University.
- Stevens, G., Jones, A., Smith, G., Nelson, J., Agho, K., Taylor, M., & Raphael, B. (2010). Determinants of paramedic response readiness for CBRNE threats. *Biosecurity and bioterrorism: biodefense strategy, practice, and science*, 8(2), 193-202.
- Özgür, S. (2006), Geleceđe Yönelen Tehdit, Kitle İmha Silahları, İstanbul: IQ Kültür Sanat Yayıncılık.
- Balicer, R. D., Omer, S. B., Barnett, D. J., & Everly, G. S. (2006). Local public health workers' perceptions toward responding to an influenza pandemic. *BMC Public Health*, 6(1).
- Niska, R. W., & Burt, C. W. (2005). Bioterrorism and Mass Casualty Preparedness in Hospitals, United States, 2003 (No. 364). US Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics.
- Bennett, R. L. (2006). Chemical or biological terrorist attacks: an analysis of the preparedness of hospitals for managing victims affected by chemical or biological weapons of mass destruction. *International journal of environmental research and public health*, 3(1), 67-75.
- Higgins, W., Wainright III, C., Lu, N., & Carrico, R. (2004). Assessing hospital preparedness using an instrument based on the Mass Casualty Disaster Plan Checklist: results of a statewide survey. *American journal of infection control*, 32(6), 327-332.
- Okumura, T., Hisaoka, T., Yamada, A., Naito, T., Isonuma, H., Okumura, S., & Takasu, N. (2005). The Tokyo subway sarin attack – lessons learned. *Toxicology and applied pharmacology*, 207(2), 471-476.
- Kim-Farley, R. J., Celentano, J. T., Gunter, C., Jones, J. W., Stone, R. A., Aller, R. D., ... & Fielding, J. E. (2003). Standardized emergency management system and response to a smallpox emergency. *Prehospital and disaster medicine*, 18(4), 313-320.
- Kılıç, S. (2006). Biyolojik silahlar ve biyoterörizm. *Türk hijyen ve deneysel biyoloji dergisi*, 63(1), 1-20.
-

Appendix***

(6) No Answer, (5) I totally agree, (4) I agree, (3) I partially agree, (2) I don't agree, (1) I totally disagree								
If you are experiencing a CBRN event and are exposed to CBRN substance, check the following.								
		1	2	3	4	5	6	Mean
1	I'm more quickly and easily impressed by my work.	9.0	9.2	26.5	23.1	26.5	5.4	3,32
2	If any symptoms have not been developed yet, I think that family members and friends will be at risk.	5.6	10.0	19.2	31.9	31.4	1.7	3,69
3	I think my colleagues will be at risk if any symptoms have not been developed yet.	7.1	10.0	20.7	35.8	23.6	2.7	3,51
4	I'm more exposed to the CBRN incident at work.	8.0	9.7	19.5	25.1	31.6	5.8	3,45
5	I'm more likely to be exposed and sick while doing my job.	4.4	9.5	16.1	26.5	40.1	3.2	3,79
6	I think my family and friends will be affected if I get sick.	6.3	4.6	15.8	31.6	39.9	1.5	3,90
7	If I'm sick, I think my colleagues will be impressed.	6.8	5.8	15.8	32.4	36.0	2.9	3,76
8	If I'm sick, I may die.	9.2	12.7	22.4	21.4	26.5	7.5	3,21
9	I was involved in a real disaster response.	42.8	15.1	4.6	6.1	6.8	24.3	1,46
Tick the following considering the personal protective equipment to be used during the CBRN incident response.								
1	Personal protective equipment is available at my location.	17.8	11.4	23.4	20.7	16.3	10.2	2,76
2	I was trained in personal protective equipment.	12.7	13.9	21.2	26.8	20.4	4.9	3,14
3	I used one of the personal protective equipment.	21.4	15.1	15.1	19.0	20.4	8.8	2,76
4	I often use the personal protective equipment that should be used when doing my job. (like mask, gloves)	8.5	8.0	10.0	29.5	41.5	2.4	3,80
5	I will use it if I'm given personal protective equipment.	5.8	4.4	11.7	24.8	50.1	2.9	4,00
6	I think the equipment is not comfortable.	14.4	19.2	24.8	18.5	12.4	10.5	2,63
7	I think personal protective equipment prevents me from doing my job.	28.5	26.0	23.4	11.2	6.3	4.4	2,28
8	I don't believe that personal protective equipment will protect me.	32.1	26.8	20.4	8.5	8.0	3.9	2,22
9	I think personal protective equipment will reduce my working efficiency.	29.0	29.9	22.1	9.7	6.3	2.7	2,26
10	I have personal protective equipment where I work.	6.1	9.2	21.2	26.8	21.7	14.8	3,04
11	There is a decontamination unit at the place where I work.	17.8	14.8	15.3	17.3	12.7	21.7	2,26
12	I got the necessary training on decontamination.	18.2	14.6	14.1	22.1	20.4	10.0	2,82
13	I always use the necessary personal protective equipment during the intervention.	10.0	5.4	18.6	30.3	30.3	5.4	3,49
When a CBRN event occurs in your location, consider your volunteering and willingness to work and mark the following.								
1	Personal protective equipment is available at my location.	17.8	11.4	23.4	20.7	16.3	10.2	2,76
2	I was trained in personal protective equipment.	12.7	13.9	21.2	26.8	20.4	4.9	3,14
3	I used one of the personal protective equipment.	21.4	15.1	15.1	19.0	20.4	8.8	2,76
4	I often use the personal protective equipment that should be used when doing my job. (like mask, gloves)	8.5	8.0	10.0	29.5	41.5	2.4	3,80
5	I will use it if I am given personal protective equipment.	5.8	4.4	11.7	24.8	50.1	2.9	4,00
6	I think the equipment used is not comfortable.	14.4	19.2	24.8	18.5	12.4	10.5	2,63
7	I think personal protective equipment prevents me from doing my job.	28.5	26.0	23.4	11.2	6.3	4.4	2,28
8	I don't believe that personal protective equipment will protect me.	32.1	26.8	20.4	8.5	8.0	3.9	2,22
9	I think personal protective equipment will reduce my working efficiency.	29.0	29.9	22.1	9.7	6.3	2.7	2,26
10	I have personal protective equipment where I work.	6.1	9.2	21.2	26.8	21.7	14.8	3,04
11	Decontamination unit where I work.	17.8	14.8	15.3	17.3	12.7	21.7	2,26
12	I got the necessary training on decontamination.	18.2	14.6	14.1	22.1	20.4	10.0	2,82
13	I always use the necessary personal protective equipment during the intervention.	10.0	5.4	18.6	30.3	30.3	5.4	3,49

*** This appendix has been developed by Gülşah Ayvazoğlu and Sevil Cengiz. It can be used with the permission of the authors and with reference.

Effect of Employees Performance on Sales in Bank of Palestine

Abstract

Due to the huge competition that has surrounded the business environment, industries, sectors, and organizations have put in place many effective plans and strategies. A great reward to employees brings about good employee performance and a subsequent increase in sales. The motivation system is one of the numerous tools used by management to improve employee performance, maintain quality products, and increased sales.

When business organizations are not bothered about the motivational plan, most times they suffer a great deal including decreased sales. To achieve employee performance which will lead to increased sales, a good motivation system must be put in place. To bring about an increased sales percentage, a good system of administration and sales influencers must be put in place by management. It is however important to investigate the nexus between employee motivation, employee performance, and sales in the bank of Palestine. Based on this argument, this research tends to investigate the Effect of employee performance on sales. The main aim of this research is to determine the effects of employee performance on sales.

This study examines the relationships between employee performance and sales in the bank of Palestine. We explore conceptually how linking the dynamics of the behaviors of employees on reward administration and its impact on productivity

Our findings suggest that higher employee motivation can lead to higher employee performance as well as sales.

Introduction

1. Background

Recently especially during the ravaging multiple dynamics that surrounded activities of contemporary organizations such as the basic and major dynamics in the scope of business. This changing nature of the business environment and the need to bring about the uniform interests of stakeholders in a way that businesses are being operated. Go bring about increased productivity and total quality, there is a need for an entirely modern approach to human resources management, which reward administration is part of.

According to Aragon, (2003), a total quality management scholar, everybody in a company must take part in the work towards the continuous building of the organization and ensuring sustainability of the organization by ensuring increased sales. Aragon opted that consumer satisfaction and employee performance are all determinants of increased sales. This means that poor consumer satisfaction and low employee performance will bring about decreased sales.

Employee performance is all about employee's increased productivity, quality of service, process, and interest in organizational activities. Omotosho, (2002) insisted employees will only perform well under good motivation systems. It should be noted that just a small portion of 40 to 50 percent of average employees will put effort into the job during a particular period. The research also suggests that to attain a great employee performance level of maybe 70 to 95 percentage, employers must put in place a great remuneration process. Sales percentage on the other hand will increase as a result of many factors including standard and quality of products. So it is therefore a chain that looks like employee motivation, increased performance, and increased sales.

Lukmon Fasasi

lukmonfasasi@gmail.com
0000-0002-8077-5054

Article Type / Makale Türü

Research Article / Araştırma Makalesi

Anahtar Kelimeler

Çalışan performansı, satış, organizasyon, rekabet

Keywords

Employee performance, sales, organization, competition

Submitted: 11 / 12 / 2020

Accepted: 31 / 12 / 2020

Before this century, employers must ensure the stimulation of reward to bring about increased performance as well as sales. Experts contend that good product standard and productivity is achievable in an organization when a good system of motivation is in place.

According to Rodney et al., (2009), "there are tendencies, judgments of those working with one will bring about sales". The appraisal that will bring about employees can either be inevitable or pervasive.

Employee's ability to judge employers could bring about essential motivational, ethical, and legal issues within the business environment, which can hinder or affect productivity. Barring good motivation and remuneration there is a higher probability that employee's performance will be low and sales will be decreasing.

A business organization will enjoy higher sales if the employee performance is on the high side. Employee's performance will always be on the higher side when their good remuneration and the best environment to carry out their duties. In other to understand the basis for this study Cole, 2002 expressed that individual acknowledgment and achievements should be a replacement for usual collective responsibility.

Employees performance assessment is also known as employee performance evaluation can be referred to as the formal, well-established system of monitoring, measuring, and evaluating the effectiveness, features, behavior as well as performance of employee's activities within a business environment.

The employee performance evaluation can assist the management as well as company owners in the formulation of policies, perspective about employees, and positioning of who should and need to be at a particular place in time within a business environment. The evaluation is important in an organization as it reveals how successful the job and unique tasks of different teams within a business organization are carried out and their contribution to achieving the business goal.

The company's goals, long and short-term objectives avail employees the opportunity to maximize their time and minimize their error by acting as a map and directions towards allocating their time spent on varying tasks judiciously. Such act in clear terms can be said to work towards employees understanding and social characteristics like their skills, ideas, personalities, capabilities, features, values, nature, customs, traditions, feelings, wants to mention but few, which are coupled with variation from employees to employees.

As these employees' wants, feelings, values are varying, it can influence the performance. This is why business organizations must use tailored training, seminars, and other developmental opportunities to solidify and bring about improvement of the employees in skills, capacity, and abilities needed to deliver their quotas to the company's goals.

Barring all the positivity, these innovative opportunities could either be effective or ineffective. Perhaps such developmental training is effective, it will bring about the increased performance of the employees and subsequently sales. But if perhaps the programs prove ineffective, such ineffectiveness will have a great effect on the performance of the employees, which apparently will low.

Business organizations are not unaware of the modern characteristics of workers which might not be based on training, skill acquisition and seminars, awards, rewards, punishment are classified as unattractive, but the lack of good monitoring and supervision might be a factor that hinders the company. To start a good business and lay a great foundation for a business environment requires sponsors to first put basic salaries at automation. Employees must not be deprived of their basic salary no matter what the country, as well as the company, is going through. Such an act of automating employee's salaries will bring about a positive attitude of the employees towards carrying out their duties.

The basic salary must be up to the industry standard if not more, but must not be lesser. This is because employees with lesser than industry-standard salary will always find alternative ways to sustain a stable and improve income for themselves by engaging in other income-generating activities, which will harm their performance in your organization. And it is clear that if employee performance becomes lower, there will be a decrease in sales.

1.1. Statement of Problem

Business operations usually are concern with planning and process where employee performance is seen as a determinant of sales. The profit motive of business organizations alongside the management put some of them in shambles where instead of ensuring improve employees performance through motivation, good remuneration, and reward system, they tend to focus on the control which is hindering increase sales percentage.

The act of rewarding employees for their performance will remain a juxtaposition. The contradiction rose while ending controversy about business goals that relate to motivational tools in one angle and the link between employee's performance and business objectives in the other angle.

According to Akata (2003), if the company's goals are expressed in an authoritative term, employees tend to be sad though authoritative business management is rather done to bring about performance. Akata insisted that good motivation brings about high workers. Due to this, it must be noted that apart from acknowledging humans in the implementation of quality management, factors like allowances, salary, and other remunerations like share bonus, entrepreneurial motivation, and productivity cash rewards for loyal and high performing employees, to mention but a few should be put in place.

It should also be of note that due to job security and fear of been sacked, employees may be a force to carry out their duties using control, but controlling or forcing employees will never bring about standardized productivity and this is a major hindrance to sales. Employers can sometimes dehumanize employees by providing a poor working environment and non-timely payment of salary and employees will still say such (Alwitt and Berger, 1993) Many employees are moved by what they. This is why a good working environment and timely payment of salary as well as remuneration is necessary for an organization. According to Derven, (1990) a unique performance appraisal system should be placed, if business organizations want to increase employee performance as well as improve their sales.

1.2. Research Questions

The questions highlighted below will be the map of this study.

1. What relationship exists between employee performance and sales in the bank of Palestine?
2. What is the relationship between employee motivation, employee performance, and sales?
3. How does employee motivation affect an employee's performance and sales?
4. What impact does management style have on employee's performance?

1.3. Aim of The Study

The aim of this research is particular about determining how employee performance affects sales in the bank of Palestine.

Other aims of the paper include:

1. To understand the relationship between an employee's performance and sales.
2. To know if there is any linkage between employee motivation, employee performance, and sales.
4. To assess the out impact of employee motivation on sales.
5. To investigate if management style influence employee performance.

2. Literature Review

2.1. Conceptual Review

2.1.1. Employee Performance and Management

Employee's performance and management can be referred to as the bringing together of all activities related to a business to attain a stable condition of the company and standardized products and sales (Ferris, 1999). Most business organizations that have experienced an improvement in the quality of their operation have recognized that broad base quality efforts are required. Therefore The concept also encompasses the organization process focusing on the continuous improvement of organizational activities to achieve the quality of products and services (Cole, 2002). The end goal of total quality management is consumer satisfaction. And this is why the concept is based on some ideas that involve thinking about quality in terms of all functions of the business organization. Total

quality management is a system approach, which consumes lots of interaction within stakeholders in an organization.

Brownbride, (1996) noted that the general effectiveness of the motivation system is greater than the sum of the unit outputs from the sub-systems.

Merier (1991) also summed the key issues and terminology related to Total Quality Management as the cost of quality been seen on the measure of non-quality as well as a measure of how the quality process is growing.

According to (Deming, 1982) quality can be forecasted on a uniform as well as low dependability cost and fitted to the sector. The research insisted that as quality improves cost will decrease and sales will increase resulting in higher performance.

Juran (1991) explained that the quality is suitable for use in terms of design, conformance, availability, safety, and field use. As such, the concept is incorporated in the point of view of the consumer. Crosby (2009) criticizes low quality in any company could amount to nothing less than 29% of sales most of that can be dodge adopting a great management style.

Ahiauзу (1999) summarizes total quality management as a new way of thinking about and ordering ideas that have to do with the management of business organizations. This is because Total Quality Management appears to be a comprehensive way of improving total organizational effectiveness.

2.1.2. Employees Motivation and performance Appraisal

The debate on whether motivation results must be allowed to determine decisions about higher pay and other appraisal outcomes like promotions remains one of the most continuous debates in human resources management. This should be subsumed into the quality of work-life, Deets, (2006).

According to Davis (2005) quality of work, life is the component values of individuals and group autonomy. The Individual's responsibility and interpersonal interdependence in business organization and task design.

Shamir and Solomon (1988) also argued that the quality of work-life must do with employee performance, which must be extended to employee's experience in fulfilling duties.



Figure 1. Diagram Showing Types Employees Motivation

Source: HRPayroll

Diagram 2.1 above showed major kinds of employee motivation that exist within a business organization. There exists a company's policies, status, relationship, working condition, pay and benefits, job security, and supervision as kinds of employees motivation.

Company Policies: Company policies can be either favorable or unfavorable to the employees. Favorable are those companies that the employees see and feel as beneficial to their work, social,

natural, and mental life. A company might have a policy of work-from-home for particular days in a week. Most employees might find this as beneficial as they can deliver their duties while having the opportunity of being around their loved ones all together. Such a company policy is termed favorable. But if a company has a policy of no break during work, where employees are made to starve while carrying out their duties, then such will be termed unfavorable. A company policy should always favor, not just the management, but the employees as well and this can serve as a motivation.

Pay and Benefits: Pay and benefits are employee's motivation that could speed up their performance 100 percent. If employees receive good pay couple with great benefits like wardrobe allowances, car allowances, security allowances, bonuses, overtime pay to mention but a few. There will be no reason to strive to survive by finding alternative income generators for themselves as the detriment of work, as such this will increase performance. Conversely, pay and benefits might lower down employee's performance if the salary is not forthcoming and is lower than the industry standard. This will make employees sort for an alternative way of generating income for themselves.

Job Security: Job security is another kind of motivation that can increase an employee's performance. If employees feel their job are secured and they are allowed to be part of the decision-making bodies of the organization, there will be an increase in their performance, as they will find ways to always secure their property.

Relationship: The kind of relationship an employee has with the business organizations can also serve as motivation. This is why it is always better to carry along employees in major activities within the business environment.

Herrick and Maccoby (2004) also observed that the main perspective of quality of work-life is concerned with the humanization of jobs. This refers to workplace democracy, job security, worker's equity, individualization, and social integration.

Equity should involve how commensurate the motivation of any employee will influence the striving of employees. This dependence relies heavily on how fitting the employees see his motivation (Wathon, 2007).

Discussion of pay at the time of performance appraisal adds up to employee's acceptance of such reward (Barnnister, 1990).

The lack of congruency between reward administration has been discovered to be a source of employee discontent and demotivation. Increased pay as well as motivation affect worker's perceptions.

In most organizations, the consistency in reward administration is aggravated by the practice of separate wage and salary, where merit rises and supervisors and managers decide bonuses arbitrarily and often secretly (Balkin, 2009).

2.1.3. Determinant of Employees Awareness

Marx (1977), insisted that it is not the consciousness of man that determines their existence, rather their social being determines their consciousness. The social being of humans therefore depends largely on the state of their material condition. For example, the average employee does not find anything strange in the work environment of the western world, because even at his home and in other aspects of his social life in the wider society. The syndrome of social existence and his general wellbeing has evolved to the level, where the rhythm of living and the general pattern of thinking and world view in his wider society correspond with that of the western industrial move of production demand.

In the bank of Palestine, the conditions and the total welfare of employees have not developed to a level that will result in the social and intellectual consciousness similar to that which exists in the western world (Richman, 2006).

2.1.4. 360 Degree Response

The 360-degree response also known as 360-degree feedback can be described as a modern attempt at employee performance assessment. Researchers, scholars, and business organizations are finding the concept a lot interesting, as they are scientifically gathering and collecting data and responses on studies and works that are relating to employee's performances.

Like a lot of other concepts of employee performance and sales percentage, the 360-degree response concept was developed based on martial usefulness, as it aids and assists in staff developmental processes. Studies revealed that scholars in the fields of human resources and relations were enmeshed in finding answers to varying questions and took them little less than a century to acknowledge 360-degree response.

After the 1990s in the past centuries, the socio econometrics method witnessed a conspicuous and unexpected usage in business organizations ranging goals such as the development of individual employees and development of a group of employees and teams, which brings about a quality relationship within and external bodies.

The 360-degree response techniques are a kind of application, which allows individual employees to be prone to information about their activities within a business environment. The 360-degree response information could be accessed through the team's head, colleagues, supervisor, customers, and other stakeholders that are closely monitoring the organization and have also been involved in the transaction with employees and organizations at one point or the other. This could have examples like subordinate assessment, personal assessment, colleagues assessment, superiors evaluation, and others.

Development of the concept of 360-degree response is related to contemporary knowledge of positions in a business environment. All stakeholders in a business environment who are closely affected by job processes and activities are capable of participating in 360-degree response i.e they can carry out assessment evaluation of performance. Co-workers can say what features, behavior, skills a co-worker have.

Table 1. Comparison Between Employees Motivation and Employees Performance

Employees Motivation	Employees Performance
Higher employees motivation will bring about higher employees performance	Higher employees performance is a result of higher employees motivation.
Lower employees motivation will bring about lower employees performance.	Lower employees performance is a result of lower employees motivation.
Employees motivation includes salaries, rewards, allowances etc	Employees performance include increased sales, standardized products, increased turnover etc.
Good management style is characterized by employees motivation.	Good management style will bring about higher employees performance.
Price for employees motivation is usually financial.	Employees motivation is price for employees performance.
Success of employees motivation can be celebrated if company's employees can see it.	Success of employees performance can be celebrate if the management can motivate more.
Employees motivation encourages employees.	Employees performance encourages management.
Lack of employees motivation can hinder standard and sales of products.	Lower employees performance can crumble business.
Two-way communication is an employee motivation.	Two ways conversion is a price for employees performance.

Source: Bailey (2005)

2.2 Theoretical Review

2.2.1. Administration Systems Theory

The administration systems theory according to (Becker, 2001), was postulated by Niklas Luhmann, a German social thinker, who gave the theory recognition as a frame of analysis in sociology. Luhmann, Kenneth Bailey as well made an important contribution to the development of administration systems theory (Ritzer, 2008).

This theory was gotten from natural science and is usable in behavioral and social studies (Buckley, 1967). Therefore, administration system theory is seen by the postulator as a common vocabulary to unit both natural study.

The administration theory is a particular concern in ranging aspects of the social world and thus operates against a piecemeal analysis of the social world. The system theory argues that the intricate relationship of parts cannot be treated out of the context of the whole. System theorists reject the idea that society or other larger-scale components of society should be treated as unified social facts. Instead, the focus is on relationships or processes at various levels within the social system (Buckley, 1967).

"There are tendencies, judgments of those working with one will bring about sales". The appraisal that will bring about employees can either be inevitable or pervasive.

Employee's ability to judge employers could bring about essential motivational, ethical, and legal issues within a business environment, which can hinder or affect productivity. Barring good motivation and remuneration there is a higher probability that employee's performance will be low and sales will be decreasing.

A business organization will enjoy higher sales if the employee performance is on the high side. Employee's performance will always be on the higher side when their good remuneration and the best environment to carry out their duties. In other to understand the basis for this study Cole, 2002 expressed that individual acknowledgment and achievements should be a replacement for usual collective responsibility.

Employee performance assessment is also known as employee performance evaluation can be referred to as the formal, well-established system of monitoring, measuring, and evaluating the effectiveness, features, behavior as well as performance of employees activities within a business environment.

The employee performance evaluation can assist the management as well as company owners in the formulation of policies, perspective about employees, and positioning of who should and need to be at a particular place in time within a business environment. The evaluation is important in an organization as it reveals how successful the job and unique tasks of different teams within a business organization are carried out and their contribution to achieving the business goal.

The company's goals, long and short-term objectives avail employees the opportunity to maximize their time and minimize their error by acting as a map and directions towards allocating their time spent on varying tasks judiciously. Such act in clear terms can be said to work towards employees understanding and social characteristics like their skills, ideas, personalities, capabilities, features, values, nature, customs, traditions, feelings, wants to mention but few, which are coupled with variation from employees to employees.

As these employees' wants, feelings, values are varying, it can influence the performance. This is why business organizations must use tailored training, seminars, and other developmental opportunities to solidify and bring about improvement of the employees in skills, capacity, and abilities needed to deliver their quotas to the company's goals.

Ball (1978) and Bailey (2005) brought about a clearer explanation of this theory. According to them, system theory starts with a professional position of the real-life situation as having fundamental relationships, as expressed in the law of gravity as used in physics. Gravity does not necessarily mean entity. This is a set of relationships. In the same vein, administration system theory demands that sociologists should develop the logic of relationships and conceptualize social reality in relational terms.

The theory sees all aspects of socio-cultural systems in process terms especially as a network of information and communication. Most importantly, systems theory is inherently integrative. Society is treated with equity not as discarded entities but as a benefitting body of study (Ball, 1978).

According to Buckley (1967) and Mead (1962), consciousness and action are inter-related. The action starts with a sign from the society that is later communicated through the authors. This sign gives these authors the needed information. Base on this information, authors are allowed to select responses.

2.3. Theoretical Framework

The exchange theory is adopted to provide the theoretical framework for this research. This theory has been selected above others for the present study because it is deemed suitable for the

researcher as a formulation that best helps construct a theoretical framework within which to study the interaction between productivity and reward administration. With exchange theory, different varieties of formulations have been made that are about employee behavior towards reward administration and the effect on productivity. These have long been used to describe and analyze the motivational bases of employee behavior and the formation of positive employee attitudes (Molm, 1994).

Adopting the exchange theory to the analysis is fundamentally underestimating the social order and bringing about a greater group in solidarizing the degree of trust in the actors that have trusted others with discharging their duties to the benefits of society other than their interest. Therefore implies in the Total quality management where reward administration determines compliance, degree of effort as well as productivity. That is a reward exchange for efficiency and effectiveness. Base on the purpose of the research, quality management is seen as occurring as the response of reward administration which extracts from individual worker commitment and dedication. So if a worker knows that his effort will be rewarded positively he does more. According to Akata (2003), if the company's goals are expressed in an authoritative term, employees tend to be sad though authoritative business management is rather done to bring about performance. Akata insisted that good motivation brings about high workers. Due to this, it must be noted that apart from acknowledging humans in the implementation of quality management, factors like allowances, salary, and other remunerations like share bonus, entrepreneurial motivation, and productivity cash rewards for loyal and high performing employees, to mention but a few should be put in place.

It should also be of note that due to job security and fear of been sacked, employees may be a force to carry out their duties using control, but controlling or forcing employees will never bring about standardized productivity and this is a major hindrance to sales. Employers can sometimes dehumanize employees by providing a poor working environment and non-timely payment of salary and employees will still say such (Alwitt and Berger, 1993) Many employees are moved by what they. This is why a good working environment and timely payment of salary as well as remuneration is necessary for an organization. According to Derven, (1990), a unique performance appraisal system should be placed, if business organizations want to increase employee's performance as well as improve their sales.

3. Methodology

3.1. Research Design

The study adopts a survey design. Based on this, a questionnaire was used and distributed to randomly selected participants. This design is considered appropriate for studying an organization with nature and population like the bank of Palestine.

Adaptation of the survey method in this study is also informed by its variability in using a sample drawn to represent the elements within the bank of Palestine. The survey method is appropriate in the study of the influence of reward administration on productivity.

3.2. Area of Study

The study will cover various departments in the bank of Palestine. The selection of the bank of Palestine was based on the fact that it is the location where most businesses on the Arabian peninsula based their operation mode.

3.3. Population of The Study

The population of this study is 223 participants made up of 154 executives staff and 69 non-executives and employees.

3.4. Sample Size

The sample size for the study is 60 participants. This sample size is about 27% of the study population. The researcher considers this sample size larger enough for the research, based on the fact that the statistical analysis that would be involved. Again, the researcher considers the sample size larger enough for effective management by the researcher due to financial constraints and the urgency of the research.

3.5. Sampling Technique

A systematic sampling method was used. To ensure that the participants have an equal opportunity of being selected. The researcher collects the list of staff from the timekeeper. Arranged the names and selecting from the 3rd person, every 3rd person were selected until the 60th respondents were selected. The researcher as well selected 42 executives and 18 non-executives staff representing 69.05% and 30.95% of the study population and sample size respectively.

3.6. Instrument for Data Collection

The questionnaire is the main instrument used for collecting data for this research. The researcher engaged the assistance of two research assistants in Palestine, who helped in the distribution and retrieval of the questionnaire to and from the participants. The questionnaire contains two partitions. The first seeks to identify the demographic characteristics of the participants while the second section seeks information on the influence of reward administration on productivity.

3.7. Methods of Data Analysis

The method of analyzing data that will be based on responses gotten through the questionnaire and would subsequently be analyzed using "Descriptive Statistics".

3.8. Hypotheses of the Study

To reasonably conclude when necessary, the hypothesis below was set for this study :

H0: No significant relationship between employee performance and sales.

H1: There is a significant relationship between employee performance and sales.

4. Data Analysis and Presentation

4.1. Demographic Variables of Respondents

Table 2. Gender Distribution of Respondents

Gender	Frequencies	Percentage
Males	42	70
Females	18	30
Total	60	100

Table 2 above shows the sex distribution of the respondents of this study. Males are 42 (70%) while females are 18 (30%). Ratio of male and female is 7:3

Table 3. Information of Marital Status of Respondents

Status	Frequencies	Percentage
The Married	48	80
The Single	12	20
Total	60	100

Table 3 above depicts the marital status of the respondents of this study. It shows that 48 (80%) of the respondents are married while 12 (20%) are single. The ratio of the married to the single is question.

Table 4. Job Status of Participants

Job Status	Frequencies	Percentage
Executives	45	75%
Non executives	15	25%
Total	60	100

Table 4 portrays the job status of respondents 45 (75%) of the respondents are academic staff while 15 (25%) are non academic staff.

Table 5. Age Distribution of Respondents

Age	Frequencies	Percentage
Below 30	–	00%
31-35	33	55%
36-40	12	20%
41-45	12	20%
46-50	3	5%
51 and above	–	00%
Total	60	100%

From table 5 above majority of the responses are within the ages 31-35. Example, 33(55%) of the responses falls within this age category, they are followed by 36-40 and 41-45 who are 12(20%) each. The least is 46-50 they are only 3(50%). Age below 30 is zero, 51 and above is also zero.

4.2. Analysis of Research Questions

Table 6. Answer of Question One

If you are motivated can you improve on your performance	Frequencies	Percentage
Yes	60	100%
No	00	00%
Total	60	100

In table6 above, all the respondents said that they can improve on their performance if motivated. This implies that there is a strong relationship between employees motivation, employees performance and performances

Table 7. Answer of Question Two

Do think that motivation for good or bad behaviour has any relationship with continuous improvement of employees performance	Frequencies	Percentage
Yes	54	90%
No	6	10%
Total	60	100

From table 4.7, it is clear that motivation has a significant impact on employees performance. For instance 54 (90%) of the response of this study agree that motivation for behaviour whether good or bad has impact on employees performance. This means punishment which is the reward for bad behaviour deters employees from performing whereas motivation encourage employees to perform.

Summary, Conclusion and Recommendation

In the course of the study, it was discovered that there is no standard system of promotion and reward administration in Arabian Gulf Company. The promotion of workers is mostly stimulated by invincible hands and not on merit. Some employees have worked between 2 to 5 years without a promotion. Wages are not uniform. People with the same qualification and experience as well as started the same period earn different wages. Observation also showed that new employees with invincible influence with less qualification earn higher than those recruited before him.

In Arabian Gulf Company, good work is less recognized, with little or no reward at all. Aside from basic salaries, staff gets little or no other benefits. This study discovered that the majority of employees are not happy with their job and this has a great effect on productivity.

Based on results, it is crystal clear that conclude that motivation has a great effect on employee's performance and sales in an organization. The total quality management is difficult to implement due to the absence of a reward for good work. Employees might be forced to work convert of different resistance.

The study has analyzed all necessary data recommends that there should be a standard system and structure of reward administration. This will, in turn, serve as a motivational tool that will provoke high productivity among workers.

There should be a system of promotion of workers that will guarantee a steady growth to good performing workers. People should be made happy while doing their job. This will enhance productivity.

Some of the staff selected for this study expressed fear in filling and answering the questionnaire. This problem was overcome by the assurance that the identity of the participants is not disclosed.

References

- Ahiauza, A. (1999). *The African industrial man*. CIMRAT publications.
- Akata, G. O. (2003). *Strategic performance management: Your key to business success*. Spectrum Books.
- Alwitt, L. F., & Berger, I. E. (1993). Understanding the link between environmental attitudes and consumer product usage: Measuring the moderating role of attitude strength. *ACR North American Advances*.
- Aragón-Correa, J. A., & Sharma, S. (2003). A contingent resource-based view of proactive corporate environmental strategy. *Academy of management review*, 28(1), 71-88.
- Ball, R. (1978). Anomalies in relationships between securities' yields and yield-surrogates. *Journal of financial economics*, 6(2-3), 103-126.
- BENARJEEBENARJEE, D., & RANI, E. R. (2004). New Perspectives of Quality of Work Life. *The Indian Journal of Commerce*, 57(1).
- Blau, P. M. (1968). Social exchange. *International encyclopedia of the social sciences*, 7, 452-457.
- Brownbridge, M., & Gockel, A. F. (1996). The impact of financial sector policies on banking in Ghana.
- Buckley, W. (1967). *Sociology and modern systems theory*.
- Cole, G. A. (2002). *Personnel and human resource management*. Cengage Learning EMEA.
- Deming, W. E., & Edwards, D. W. (1982). *Quality, productivity, and competitive position* (Vol. 183). Cambridge, MA: Massachusetts Institute of Technology, Center for advanced engineering study.
- Derven, M. G. (1990). Paradox of performance appraisals. *Personnel Journal*.
- Ferris, G. R., Hochwarter, W. A., Buckley, M. R., Harrell-Cook, G., & Frink, D. D. (1999). Human resources management: Some new directions. *Journal of management*, 25(3), 385-415.
- Homans, G. C. (1967). *The nature of social science* (Vol. 62). Harcourt.
- Johnson, D. R. (1990). *Gray's Anatomy*: Edited by PL Williams, R. Warwick, M. Dyson and LH Bannister. Pp. 1600. 1989. Edinburgh, Churchill Livingstone. Hardback, £70.00.
- Juran, J. M. (1991). Strategies for world-class quality. *Quality progress*, 3, 81-85.
- Marx, K. (1977). *Critique of Hegel's 'Philosophy of right'*. CUP Archive.
- Merier, G. (1991). *The New Industrial State*.
- Molm, L. D. (1994). Dependence and risk: Transforming the structure of social exchange. *Social Psychology Quarterly*, 163-176.
- Omotosho, J. B. (2002). Synoptic meteorology: pathway to seasonal rainfall prediction for sustainable agriculture and effective water resources management in West Africa but Nigeria in particular. *Journal of the Nigerian Meteorological Society*, 3(2), 82-88.
- Planas, L. G., Crosby, K. M., Mitchell, K. D., & Farmer, K. C. (2009). Evaluation of a hypertension medication therapy management program in patients with diabetes. *Journal of the American Pharmacists Association*, 49(2), 164-170.
- Ritzer, G., & Jurgenson, N. (2010). Production, consumption, prosumption: The nature of capitalism in the age of the digital 'prosumer'. *Journal of consumer culture*, 10(1), 13-36.
- Rodney Turner, J., Müller, R., & Dulewicz, V. (2009). Comparing the leadership styles of functional and project managers. *International Journal of Managing Projects in Business*, 2(2), 198-216.
- Werther, W. B., & Davis, K. (1993). *Human resources and personnel management*.
-

MENA Ülkelerinde Finansal Gelişme ve Yoksulluk İlişkisi
The Relationship between Financial Development and Poverty in MENA Countries

Öz

Finansal gelişmenin büyüme, eşitsizlik ve yoksulluk ile olan ilişkisi son dönemlerde özel bir inceleme alanı haline gelmiştir. Bu alanda, özellikle az gelişmiş ve gelişmekte olan ülkeler geniş kapsamlı bir analiz kümesi oluşturmaktadır. Mevcut çalışmada, 1980-2017 dönemi periyoduna ait verilerle seçilmiş MENA ülkeleri (Cezayir, Bahreyn, Mısır, İran, İsrail, Ürdün, Kuveyt, Malta, Fas, Suudi Arabistan, Tunus ve Türkiye) için finansal gelişme ve yoksulluk arasındaki ilişki ele alınmaktadır. Elde edilen Panel ARDL Sınır Testi sonuçlarına göre, uzun dönemde finansal gelişmede ortaya çıkan artış yoksulluğu arttırmaktadır. Ayrıca ekonomik büyüme ile yoksulluk arasında Ters-U şeklinde bir ilişki söz konusudur. Kurulan modelde yer alan diğer değişkenlerden enflasyon, dışa açıklık ve kamu harcamalarındaki artış ise yoksulluğu azaltmaktadır.

Abstract

The relationship between financial development, growth, inequality and poverty has recently become a special investigation field. In this field the less developed and developing countries constitute a comprehensive analysis set. In this study, it is purposed to examine the relationship between financial development and poverty for selected MENA countries (Algeria, Bahrain, Egypt, Iran, Israel, Jordan, Kuwait, Malta, Morocco, Saudi Arabia, Tunisia and Turkey) over the period of 1980-2017. According to the Panel ARDL Boundary Test results, the increase in financial development in the long run increases poverty. In addition, there is an Inverse-U relationship between economic growth and poverty. Among the other variables in the model established, inflation, openness and increase in public expenditures reduce poverty.

Giriş

Son dönemlerde, finansal gelişme ile yoksulluk arasındaki ilişkinin tespit edilmesi öne çıkan ve ilgili çeken alanlardan biri olmuştur. Yoksulluğun azalacağını öngören yaklaşımlar genellikle neoliberal görüşler çerçevesinde, küreselleşme ile birlikte sermaye ve ticaretin serbest dolaşımının gerçekleşebilmesi önündeki engellerin ortadan kaldırılması, finansal derinliğin oluşması ve yoksul bireylerin daha fazla kaynağa ulaşma imkânına sahip olması gibi durumlara odaklanmaktadır (Arestis ve Caner, 2005). Bunun yanında finansal gelişmenin makroekonomik istikrarsızlık ve daha fazla yoksulluk anlamına geldiğini ileri süren görüşler de (Easterly ve Fischer, 2001) oldukça dikkat çekicidir. Finansal gelişmenin yoksulluğu etkileme mekanizmaları göz önüne alındığında bu alanda birçok farklı görüş ileri sürülmekle birlikte, esas olarak finansal gelişmenin doğrudan ve dolaylı olmak üzere iki farklı kanaldan yoksulluğu etkilediği üzerine vurgu yapılmaktadır. Doğrudan etki kanalında, finansal gelişmeyle birlikte yoksul kesimin finans kaynaklarına erişim olanaklarının artmasıyla yoksulluğun azalacağı öngörülmürken, dolaylı etki mekanizmasında ise bu etkinin ekonomik büyüme ile gerçekleştiği ifade edilmektedir (Abdin, 2016: 45).

Müge Manga

Dr. Öğr. Üyesi,
Erzincan Binali Yıldırım Üniversitesi
mangamuge@gmail.com
Orcid: 0000-0003-2675-2182

Article Type / Makale Türü

Research Article / Araştırma Makalesi

Anahtar Kelimeler

Finansal gelişme, Yoksulluk, MENA Ülkeleri

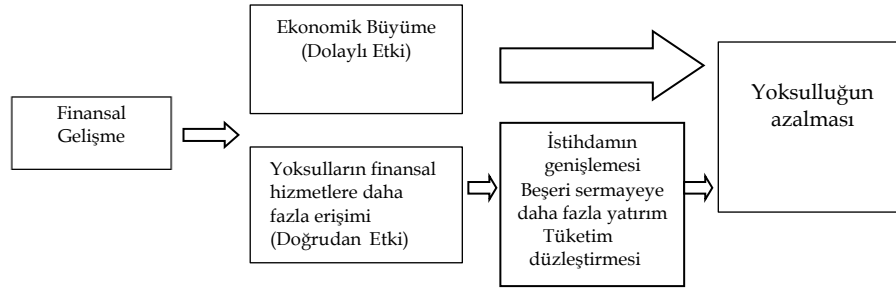
Keywords

Financial development, Poverty, MENA countries

JEL: D63, E44, G21, I32

Submitted: 15 / 10 / 2020

Accepted: 06 / 12 / 2020



Şekil 1. Finansal Gelişmenin Yoksulluğu Etkileme Kanalları

Kaynak: Claessens ve Feijen, 2007:37; Zhuang vd., 2009: 10

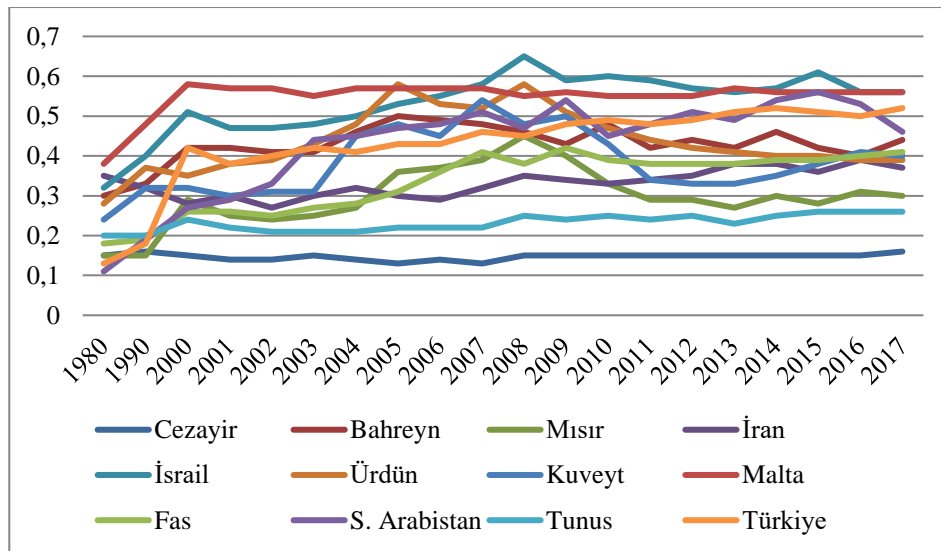
Finansal gelişme ile yoksulluk arasındaki ilişkinin gösterildiği Şekil 1’de doğrudan ve dolaylı etkilerin sırasıyla yoksulluk üzerindeki etkisi ifade edilmektedir. Bu çerçevede vurgulanması gereken ilk husus, finansal gelişmenin yoksulluğu azaltma noktasında en kritik olan rolün ekonomik büyüme aracılığıyla gerçekleştiğidir. Dolayısıyla ekonomik büyümenin yoksulluğu azaltma kanalları farklı şekillerde ortaya çıkmaktadır. Şöyle ki ekonomik büyümeyle birlikte istihdam alanları genişlemekte, vasıflı ve vasıfsız işgücü arasındaki ücret farklılığı azalmakta, diğer yandan artan büyüme oranı daha fazla vergi geliri anlamına geldiğinden devletin yoksul kesim için daha fazla eğitim, sağlık ve sosyal harcama yapması mümkün hale gelmektedir. Ayrıca ekonomik büyümeyle birlikte sermaye birikiminin artması toplumdaki dezavantajlı kesimler için yeni yatırımları yapma olanağı yaratmaktadır (Zhuang vd., 2009: 10). Ayrıca finansal gelişmenin ekonomik büyüme ile birlikte artışının gelir eşitsizliğine de yol açtığı vurgulanmaktadır. Buna göre ticari nedenlerle bankaların sadece yeterli güvenceye sahip hane halklarına kredi vermesi toplumun en yoksul kesiminin yeterli düzeyde güvenceye sahip olmamaları dolayısıyla finansal sistemin dışına itilmelerine yol açmaktadır. Bu durumda sadece zenginlerin kredi sistemine erişebilmeleri söz konusu olmakta dolayısıyla finansal sektördeki iyileşmeler zenginlerin lehine sonuçlanarak, zengin ve yoksul kesim arasındaki gelir eşitsizliğinin artmasına neden olmaktadır (Dhrifi, 2015: 1164). Böylelikle finansal gelişme ile gelir eşitsizliği arasındaki ilişkinin boyutu önem kazanmaktadır. Greenwood ve Jovanovic (1990) modeli finansal gelişme ile gelir eşitsizliği alanında önemli katkılar sunmuştur. Finansal gelişmesinin başlangıç evrelerinde yoksulların zengin kesime kıyasla daha az tasarruf etmelerinden dolayı servet birikimi daha yavaş gerçekleşmektedir. Bu yolla iki kesim arasındaki gelir farklılıkları genişleyerek eşitsizliğin artmasına yol açmaktadır. Zaman içerisinde finansal sistemin olgunlaşması ve finansal işlemlerin maliyetinin düşmesiyle toplumun daha geniş kesiminin finansal kaynaklara erişimi sağlanır. Zaman içerisinde gelişmiş finansal yapı istikrarlı gelir dağılımı sağlayarak farklı kesimler arasındaki eşitsizliğin azalmasına yol açar. Finansal gelişme ile eşitsizlik arasındaki bu ilişki ters-U şeklinde karakterize edilmektedir (Greenwood ve Jovanovic, 1990; Jalilian ve Kirkpatrick, 2005: 642).

Finansal gelişmenin doğrudan etkilerine bakıldığında ise gelişmiş finansal piyasalar yoksullar için kredi piyasasına ve finansal hizmetlere daha iyi erişim sağlayarak doğrudan yoksulluğun azalmasına katkı sağlamaktadır (Abdin, 2016: 45). Fakat Stiglitz (1993)’e göre gelişmekte olan ülkelerde finansal piyasaların etkin işleyişini sınırlayan piyasa aksaklıkları (asimetrik bilgi, ahlaki risk ve ters seçim problemleri) sermayenin orantısız bir şekilde dağılmasına yol açarak daha fazla eşitsizliğe yol açmaktadır.

Finansal gelişmenin yoksulluğun azaltılması üzerindeki olumlu etkisi 1970’lerdeki McKinnon (1973) ve Shaw (1973) yaklaşımlarına dayanmaktadır. Kamu kesiminin bankacılık sektörü üzerindeki faiz tavanı, yüksek miktardaki rezerv gereksinimleri, yönlendirilmiş kredi programları gibi kısıtlamalar finansal gelişmeyi engelleyerek ekonomik büyümeyi yavaşlatmaktadır. Bu kısıtlamaların yatırım kararların üzerindeki olumsuz etkisinin ortadan kaldırılması için finans sektörünün liberalleştirilmesi gerekmektedir (McKinnon, 1973; Shaw, 1973; Khan ve Senhadji, 2000: 4). Finansal sektörün gelişmesiyle yoksulların dış finansman elde etmelerini sağlayan bilgi eksikliği giderilerek sermaye tahsisinin verimliliği artmaktadır. Bu açıdan ele alındığında finansal gelişme yoksulluğun azaltılmasında kritik bir rol oynamaktadır. Finans sektörünün gelişmesi yoksullara

sadece kredi imkânı sağlamamakta bunun yanında tasarruf olanaklarını da desteklemektedir (Abdin, 2016: 46). Claessens ve Feijen (2007)'e göre finansal sektörün derinleşmesi, riskleri geniş ölçüde yayarak bireylerin maruz kalabileceği şokların bertaraf edilmesine katkı sağlamaktadır. Bu aynı zamanda büyümenin daha istikrarlı olmasını sağlayarak iki yoldan yoksulluğu azaltmaktadır.

Gelişmiş finansal sistemin eşitsizliği ve yoksulluğu azaltacak avantajlarına vurgu yapılsa da finansal sistemin eşitsizlik ve yoksulluğun azaltılmasını sağlayacak mekanizmalarına yönelik bazı eleştiriler söz konusudur. Bu eleştirilerin en önemlisi finans piyasalarına müdahale edilmediğinde verimli şekilde çalışacağı varsayımına yöneliktir. Bununla bağlantılı olarak finansal liberalizasyon ve büyüme kanalıyla tasarrufların artarak bunun sonraki dönemde finansal gelişmeyi destekleyeceği argümanına ilişkindir. Bu eleştiriler yakından incelendiğinde ise esas olarak şu noktaların öne çıktığı görülmektedir: ilk olarak finansal deregülasyon, finansal sektörde faaliyet gösteren araçlar arasındaki rekabeti artırarak finansal açıdan daha önce kısıtlı imkânlarla sahip birimlerin borçlanmasını artırmaktadır. Borçlanmadaki artış tasarrufların azalmasına neden olmaktadır. İkinci olarak finansal sektörün döviz piyasasını da içerek şekilde genişlemesi sermaye girişi sağlasa da bu durumun gelir ve tasarruflar üzerindeki etkisi geçici olmaktadır. Üçüncü olarak gelir etkisinin ikame etkisinden büyük olması durumunda faiz oranlarının serbestleştirilmesi bireylerin tasarruflarından vazgeçmelerine neden olmaktadır (Arestis ve Caner, 2005: 6). Fowowe ve Abidoeye (2013), finansal gelişmenin resmi finansal kurumların genişlemesi anlamına geldiğini ileri sürerek finansal gelişmeyle birlikte bu kurumların orantısız biçimde büyümesinin yoksulların kredi talebinde düşüşe yol açacağını savunmaktadır. Çünkü resmi finansal araçlar borç verme işlemi esnasında esnek olmayan bir çerçevede teminat ve geçmiş dönemdeki işlemlere ait bilgiler gibi kriterleri talep ettiklerinden yoksul kesimin önemli kısmı bu kriterleri karşılayamamaktadır. Dolayısıyla yoksul kesimin sanıldığı gibi kolaylıkla kredilere erişimi sorunsuz bir şekilde gerçekleşmemektedir. Ayrıca, finansal araçların borç verme kriterlerini esnettikleri ve yoksullara borç vermeye hazır oldukları durumlarda bile, yoksulların söz konusu kredilerin varlığı ve bunlara nasıl erişileceği konusunda yeterli bilgiye sahip olmamaları nedeniyle eşitsizliğin ve yoksulluğun azalma olanağı sınırlanmaktadır (Fowowe ve Abidoeye, 2013: 567).



Şekil 2. MENA Ülkeleri ve Türkiye’de Finansal Gelişme Endeksi, 1980-2017
Kaynak: IMF Database

Finansal gelişme endeksinin ülkeler açısından incelenmesi öncesinde bu endeksin kapsamının açıklanması gerekmektedir. IMF tarafından 180 ülke için hesaplanan finansal gelişme endeksi, finansal kurumların ve piyasaların derinlik (genişlik ve likidite), erişilebilirlik (bireylerin ve kurumların finansal hizmetlere erişimi) ve etkinlik (kurumların düşük maliyet ve sürdürülebilir gelirlerle finansal hizmetler sunma kapasitesi ve sermaye piyasalarının faaliyet düzeyi) konularında nasıl bir gelişim trendi izlediklerini gösteren dokuz alt endeksten oluşan bir göstergedir (IMF, 2020).

Şekil 2’de seçilmiş MENA ülkeleri ve Türkiye için gösterilen finansal gelişmenin seyrine bakıldığında İsrail, Malta, Suudi Arabistan ile birlikte Türkiye’nin özellikle 2000’lerden sonraki yükselişi dikkat çekmektedir. Cezayir ve Tunus en düşük finansal gelişmişlik seviyesine sahip ülkeler olarak öne çıkarken, diğer ülkelerde ise endeksin genel itibariyle dalgalı bir seyir izlediği görülmektedir.

Dolayısıyla bu çalışmada 1980-2017 dönemi verileriyle seçilmiş MENA ülkeleri için Panel ARDL yöntemiyle finansal gelişmenin yoksulluk üzerindeki etkisi araştırılmıştır. Çalışmanın ilk bölümünde ilgili konu hakkında giriş bağlamında değerlendirmeler yapılırken, ikinci bölümde finansal gelişmenin yoksulluğu doğrudan ve dolaylı etkileme kanalları üzerine ve üçüncü bölümde ise ampirik literatür ile ilgili gerekli açıklamalara yer verilmektedir. Çalışmanın dördüncü bölümünde yapılan ampirik analizde kullanılan veriler, ekonometrik yöntem ve bulgular ortaya konulmakta iken, sonuç bölümünde ise elde edilen bulgulardan hareketle finansal gelişmenin seçilmiş ülkelerdeki yoksulluk üzerinde yarattığı etkisine yönelik politika çıkarımları tartışılmıştır.

1. Ampirik Literatür

Finansal gelişme ile yoksulluk arasındaki ilişkiyi ortaya koyan çalışmalar çok geniş kapsamda ele alınmaktadır. Ekonomik büyümenin eşitsizlik ve yoksulluk üzerindeki etkileri de göz önüne alındığında ülke/ülke grupları, kullanılan değişkenler, ampirik metodoloji açısından farklı sonuçların elde edildiği çalışmaları aşağıdaki şekilde özetlemek mümkündür.

Hassan ve Islam (2005), 1974-2003 dönemi verileriyle Bangladeş için finansal gelişmenin ve ticari açıklığın ekonomik büyüme kanalıyla yoksulluk azalışı üzerindeki etkisini test ettikleri çalışmada finansal gelişme ve ticari açıklığın büyüme aracılığıyla yoksulluğu azaltmadığı sonucuna ulaşılmaktadır.

Boukhatem (2016), 1986-2012 döneminde 67 alt ve orta gelirli ülkelerde finansal gelişmenin yoksulluk üzerindeki etkisini test etmek amacıyla kurulan modelde, mevduat bankaları tarafından verilen özel krediler/GDP, likit borçlar/GDP, M3/GDP ve banka temerküzü değişkenleri finansal gelişme göstergeleri olarak yer almıştır. Elde edilen sonuçlara göre finansal gelişme yoksulluğun azaltılmasına katkı sağlarken finansal gelişme ile ilgili istikrarsızlık yoksul kesim üzerinde olumsuz sonuçlara yol açmakta ve finansal gelişmenin olumlu etkilerini ortadan kaldırmaktadır.

Jalilian ve Kirkpatrick (2005), Gini katsayısı, özel krediler, GDP artışı, GDP, kamu harcamaları, dışa açıklık, enflasyon ve ortalama orta öğretim yılı değişkenlerini kullanarak 1965-1990 dönemi için gelişmekte olan ülkelerde finansal gelişmenin yoksulluğa etkisini araştırmıştır. Elde edilen sonuçlar ekonomik gelişmenin eşik değerine bağlı olarak finansal gelişmenin dolaylı etkisi olan büyüme aracılığıyla yoksulluğu azalttığını göstermektedir. Bunun yanında finansal gelişmenin yoksulluğun azaltılması hususundaki olumlu etkisi finansal gelişmeden kaynaklanan gelir eşitsizliğindeki değişikliklerden etkilenmektedir.

Odhiambo (2010a), 1969-2006 dönemine ait veri setini kullanarak Zambiya ekonomisi için finansal gelişme-yoksulluk arasındaki ilişkiyi ölçtüğü çalışmasında finansal gelişme göstergesi olarak kullanılan vekil değişkene göre sonuçların değiştiği bulgusuna ulaşmıştır. Örneğin, finansal gelişme göstergesi olarak M2/GDP değişkeninin kullanılması durumunda yoksulluk finansal gelişmenin nedeni iken yurtiçi özel sektör kredileri/GDP ve yurtiçi banka varlıkları/GDP göstergelerinin kullanılması halinde ise finansal gelişme yoksulluk azalışının nedeni olmaktadır. Yazarın (Odhiambo, 2010b) benzer biçimde Kenya ekonomisine dair 1968-2006 dönemine ilişkin yaptığı araştırmada finansal gelişmeden yoksulluğun azalmasına doğru belirgin bir nedensellik ilişkisi olduğu sonucuna ulaşmıştır. Buna ilave olarak finansal gelişmeden tasarruflara doğru tek yönlü, tasarruflar ile yoksulluğun azaltılması arasında ise iki yönlü nedensellik ilişkisi tespit edilmiştir.

Dhrifi (2015), gelir seviyesine göre üç farklı ülke grubunda finansal gelişmenin ekonomik büyüme ve eşitsizlik üzerindeki etkisini de göz önüne alarak yoksulluk azalışı üzerindeki etkisini incelemiştir. 1990-2010 arası dönem için elde edilen sonuçlar şu şekilde sıralanabilir: i) Finansal gelişme, orta ve yüksek gelirli ülkelerde büyümeyi teşvik edip yoksulluğu azaltırken düşük gelirli ülkelerde herhangi bir pozitif etkiye sahip değildir. ii) Finansal gelişme düşük ve orta gelirli

ülkelerde gelir eşitsizliğine yol açarken yüksek gelirli ülkelerde eşitsizliği azaltmaktadır. Jeanneney ve Kpodar (2011)'in geliştirmekte olan ülkelerde 1966-2000 dönemi için yaptıkları analizin sonuçları, finansal gelişmenin yoksullara sağladığı avantajlarının maliyetlerinden daha fazla olduğunu göstermektedir. Fakat finansal istikrarsızlık yoksulların elde ettiği bu faydaları azaltarak finansal gelişmeyle elde edilen olumlu durumu dengelemektedir. Ayrıca çalışmada, McKinnon yaklaşımında ileri sürülen "kanal etkisi"nin yoksulların finansal gelişmeden yararlandığı temel mekanizma olduğu sonucuna ulaşılmıştır.

Donou-Adonsou ve Sylwester (2016), geliştirmekte olan 71 ülkede 2002-2011 dönemi için kredi bankaları ve mikro finans kuruluşlarının (MFIs) rolünü de dikkate alarak kredilerin GDP içerisindeki payının finansal gelişme göstergesi olarak kullanıldığı çalışmada, finansal gelişmişlik ile yoksulluk arasındaki ilişki test edilmiştir. Kredi bankaların yoksulluk üzerindeki etkisi bağımlı değişkene göre değişmektedir. Buna göre bağımlı değişken olarak yoksulluk sınırlarının altında yaşayan nüfusun yüzdesini ifade eden yoksul sayısı (poverty headcount) ve yoksulluk açığı (poverty gap) kullanıldığında kredi bankalarının yoksulluğu azalttığı ortaya konulurken yoksulluk açığının karesi dikkate alındığında ise önemli bir etkinin olmadığı tespit edilmiştir. Mikro finans kuruluşlarının etkisine bakıldığında ise kullanılan yoksulluk ölçüsüne bakılmaksızın yoksulluk üzerinde herhangi bir etkisinin olmadığı görülmektedir. Bu sonuçlar, bankaların yoksulluğu azaltma kabiliyetine sahip olmalarına rağmen, MFI'lerin en azından toplam düzeyde böyle bir etkiye sahip olmadığını göstermektedir.

Abdin (2016), Bangladeş için 1974-2013 periyodu verilerini kullanarak zaman serisi analizinde finansal gelişmenin yoksulluk azalışına olan etkisini ölçmüştür. Elde edilen bulgular, finansal gelişmenin yoksullar için tasarruf ve daha fazla krediye erişme imkânı sağlayarak doğrudan yoksulluğu azaltmasının yanı sıra ekonomik büyümeyi teşvik ederek dolaylı yoldan da yoksulluğun azalmasına katkı sağladığına işaret etmektedir. Finansal istikrarsızlık ise daha önceki çalışmalara paralel olarak yoksulluğun azaltılmasını olumsuz yönde etkilemektedir. Kar vd. (2011a), Türkiye ekonomisinde 1970-2007 dönemi için zaman serisi yöntemiyle finansal gelişme, ekonomik büyüme ve yoksulluğun azaltılması arasındaki nedensellik ilişkisini ele aldıkları çalışmada elde edilen bulgular, finansal gelişmenin ekonomik büyümeye yol açmakla birlikte ekonomik büyümenin yoksulluğun azalmasını bir nedeni olduğunu göstermektedir. Fakat kısa vadede finansal gelişmeden yoksulluk azalışına yönelik bu ilişkinin oldukça sınırlı olduğu görülmektedir.

Zhang ve Ben Naceur (2019), geliştirmekte olan 143 ülke verisini kullanarak 1961-2011 dönemi için finansal erişim, finansal derinlik, finansal verimlilik, finansal istikrar ve finansal serbestleşme gibi finansal gelişim göstergelerinin eşitsizlik ve yoksulluk üzerindeki etkisini araştırmıştır. Analiz sonuçları finansal serbestleşmenin gelir eşitsizliği ve yoksulluk üzerinde anlamlı bir etkiye sahip olmadığını; fakat finansal gelişmenin diğer boyutlarının eşitsizlik ve yoksulluğu azalttığını göstermektedir. Diğer yandan bankacılık sektörünün gelişimi, gelir eşitsizliğini azaltmada stok piyasalarının gelişimine kıyasla daha fazla etkiye sahiptir. Fowowe ve Abidoye (2013)'nin Afrika ülkeleri için 1981-2005 periyoduna ait verilerle elde ettikleri ampirik sonuçlar finansal gelişmenin yoksulluk ve eşitsizlik üzerinde önemli bir etkisinin olmadığını ortaya koymaktadır.

Perez-Moreno (2011), geliştirmekte olan ülkeler için finansal gelişme ve yoksulluk arasındaki nedensellik ilişkisini farklı dönem ve göstergeler kullanarak incelemiştir. Buna göre 1970-1980 dönemi için finansal gelişme göstergesini temsilen M2/GDP ve M3/GDP kullanılması durumunda finansal gelişme yoksulluğun azalmasını desteklerken, 1980-1990 periyodu için finansal gelişmeyi temsilen finansal araçlar tarafından özel sektöre verilen krediler/GDP göstergesinin tercih edilmesi halinde finansal gelişme ile yoksulluk arasında herhangi bir nedensellik ilişkisi söz konusu olmadığı sonucu elde edilmiştir.

Chemli (2014)'nin 1990-2012 dönemi arası verileri kullanarak ARDL yöntemiyle 8 MENA ülkesi (Cezayir, Mısır, İran, Ürdün, Moritanya, Fas, Tunus ve Yemen) için yaptığı çalışmanın sonuçları finansal gelişmenin yoksulların lehine sonuçlar doğurduğunu göstermektedir. Farklı finansal gelişme göstergeleri kullanıldığında ise yurtiçi özel sektör kredileri/GDP değişkeni yoksulluğun azaltılması açısından Cezayir, İran, Ürdün ve Tunus için anlamlı sonuç verirken M3/GDP değişkeni ise tüm ülkeler için anlamlı ve pozitifdir. Zahonog (2017), 1980-2012 döneminde, GMM yöntemiyle

42 Sahra-altı Afrika ülkesi için finansal gelişme ile yoksulluk arasındaki ilişki incelemiştir. Elde edilen sonuçlar finansal gelişme ile yoksulluk arasında ters-U şeklinde bir ilişki olduğunu göstermektedir. Buna göre belirli bir eşik değerine ulaşıncaya kadar finansal gelişme yoksulluğun artmasına yol açarken eşik değerinden sonra finansal gelişme ile yoksulluk azalışı gözlemlenmektedir. Rewilak (2017), 2004-2015 arası dönem için yaptığı analizin sonuçları farklı bulgular sunmaktadır. Bu bulgular şu şekilde sıralanabilir: i)finansal derinleşme yoksulluğun azaltılmasında çok büyük etkiye sahip olmakla birlikte finansal kaynaklara erişimi de artırmaktadır, ii)finansal istikrarsızlık ve bankacılık sektörü verimsizliği yoksulluğun azaltılması noktasında herhangi bir zararlı etkiye sahip değildir, iii)kırılgan hale gelen finansal sektör, yoksulluğu azaltan bir kanal olarak kişilere ve yenilikçi küçük işletmelere kredi verme sistemini bozmaktadır.

Pradhan (2010), Hindistan için 1951-2008 döneminde finansal gelişme, ekonomik büyüme ve yoksulluk azalışı arasındaki nedensellik ilişkisini araştırdığı çalışmada yoksulluk azalışından ekonomik büyümeye, ekonomik büyümeden finansal gelişmeye, finansal gelişmeden yoksulluk azalışına, ekonomik büyümeden yoksulluk azalışına doğru tek yönlü nedensellik bulgusuna ulaşmıştır. Sehrawat ve Giri (2016), Güney Asya ülkeleri için 1990-2013 döneminde finansal gelişme, kırsal-kentsel gelir eşitsizliği ve yoksulluk azalışı arasındaki nedensellik ilişkisine yönelik bulgularına göre finansal gelişme ve ekonomik büyüme yoksulluğu azaltırken kırsal-kentsel gelir eşitsizliği artırmaktadır. Her iki değişken arasındaki nedenselliğin yönü incelendiği zaman kısa dönemde kırsal-kentsel gelir eşitsizliği ve finansal gelişmeden yoksulluk azalışına, ekonomik büyümeden eşitsizliğe doğru ise tek yönlü bir nedensellik söz konusudur.

Dewi vd. (2018), 1980-2015 dönemi için Endonezya'da finansal gelişme, ekonomik büyüme ve yoksulluk azalışı arasında uzun dönemli bir ilişkinin varlığını tespit etmiştir. Çalışmada elde edilen nedensellik bulguları ise finansal gelişmeden yoksulluk azalışına doğru tek yönlü, ekonomik büyüme ve yoksulluk azalışı arasında ise iki yönlü bir ilişkinin olduğunu göstermektedir. Belen ve Karamelikli (2016), Türkiye için 1987Q1-2015Q2 dönemine ait çeyreklik verileri kullanarak yaptıkları çalışmada finansal gelişmenin yoksulluk azalışını doğrudan ve dolaylı olarak desteklediğini saptamıştır. Diğer yandan kısa dönemde finansal gelişmeden yoksulluk azalışı ve ekonomik büyümeye doğru tek yönlü nedensellik söz konusu iken, uzun dönemde finansal gelişme ile yoksulluk azalışı arasında herhangi bir ilişki tespit edilememiştir. Uddin vd. (2014), 1975-2011 yılları arası çeyreklik verilerle Bangladeş ekonomisi için yaptıkları çalışmada, finansal gelişme ve ekonomik büyümenin yoksulluğun azaltılmasında etkili olmadığı sonucuna ulaşmıştır. Yapılan çalışmada, ayrıca yoksulluk azalışının finansal gelişmeyi teşvik ettiği yönünde bir sonuç da elde edilmiştir.

İlgili literatürde yer alan ampirik çalışmalar incelendiğinde, ülke örnekleme ve belirlenen dönem aralığına bağlı olarak elde edilen bulgu ve çıkarımların değiştiği görülmektedir. Bu çalışmada yapılan analizde seçilen ülkeler MENA ülkelerinden oluşmaktadır [MENA ülke grubu içerisinde Türkiye'nin de yer almasında Kar vd. (2011b) çalışması takip edilmiştir]. Bu ülkelerin yapılan analize konu olmasındaki en temel sebep, seçilen grupta yer alan ülkelerin finansal gelişme göstergeleri bakımından benzer durumda olmalarıdır. Ayrıca seçilen ülkelere, gelişmiş ülkelerin finans yapısına göre daha geride kalan piyasaları ile yoksulluğun ne yönde etkilendiği merak konusudur. Yapılan analizde seçilen ülkelerin belirlenmesinde, MENA ülkelerindeki finansal gelişme üzerine yapılan, panel veri analiz yöntemine dayalı çalışmaların hala azınlıkta olması da etkili olmuştur (Ben Naceur vd., 2008:2).

2. Model, Veri ve Yöntem

Bu çalışmada, 1980-2017 yılları arasındaki seçilmiş MENA ülkeleri (Cezayir, Bahreyn, Mısır, İran, İsrail, Ürdün, Kuveyt, Malta, Fas, Suudi Arabistan, Tunus, Türkiye) için yoksulluk göstergesi ile finansal gelişmişlik endeksi arasındaki ilişki test edilmektedir. Ayrıca kurulan modele kontrol değişkeni olarak, GDP, GDP², enflasyon, dışa açıklık ve kamu harcamalarının GDP'deki payı eklenmiştir. Yapılan çalışmada ampirik modelin oluşması aşamasında Zhang ve Naceur (2019) çalışması esas alınmıştır. Bu çerçevede oluşturulan model,

$$\ln(POV_t) = \delta_0 + \delta_1 \ln FDI_t + \delta_2 \ln GDP_t + \delta_3 \ln GDP_t^2 + \delta_4 \ln INF_t + \delta_5 \ln TRADE_t + \delta_6 \ln GOV_t + \varepsilon_t \quad (1)$$

şeklinde belirlenmiştir. Model de yer alan değişkenler ve detayları Tablo 1’de yer almaktadır.

Tablo 1. Değişkenler ve Detayları

Değişken	Tanımı ve Kaynağı
Yoksulluğun azalması (POV)	Hanehalkı nihai tüketim harcamalarının GDP’deki payı, hane halkı tarafından satın alınan dayanıklı ürünler (otomobiller, çamaşır makineleri ve ev bilgisayarları vs.) dahil tüm mal ve hizmetlerin piyasa değeridir. Bu oran, konut alımlarını içermemekle birlikte, mülk sahibi tarafından kullanılan konutlar için tahakkuk ettirilmiş kira bedellerini kapsamaktadır. Ayrıca, izin ve lisans almak için hükümete yapılan ödemeleri ve ücretleri de içerir. Veri Kaynağı: World Bank, Development Indicators
Finansal Gelişmişlik İndeksi (FDI)	Finansal kurumların ve piyasaların derinlik (genişlik ve likidite), erişilebilirlik (bireylerin ve kurumların finansal hizmetlere erişimi) ve etkinlik (kurumların düşük maliyet ve sürdürülebilir gelirlerle finansal hizmetler sunma kapasitesi ve sermaye piyasalarının faaliyet düzeyi) konularında nasıl bir gelişim trendi izlediklerini gösteren dokuz alt endeksten oluşan bir göstergedir. Veri Kaynağı: IMF database
Kişi Başı Gayri Safi Yurtiçi Hasıla (GDP)	Yerel para birimi cinsinden kişi başı GDP değeridir. Veri kısıtı nedeniyle tercih edilmiştir. Veri Kaynağı: World Bank Development Indicators
Kişi Başı Gayri Safi Yurtiçi Hasılanın Karesi (GDP ²)	Bu değişken ekonomik büyüme ile yoksulluk arasındaki ilişkinin yapısını test etmek için modele eklenmiştir. Veri Kaynağı: World Bank Development Indicators
Enflasyon oranı % (INF)	Tüketici fiyat endeksi ile ölçülen enflasyon, belirli aralıklarla sabitlenebilecek veya değiştirilebilecek bir mal ve hizmet sepeti satın alma maliyetinin yıllık ortalama değişim yüzdesini yansıtmaktadır. Laspeyres formülü kullanılarak hesaplanmıştır. Veri Kaynağı: World Bank Development Indicators
Dışa açıklık Oranı % (TRADE)	Mal ve hizmet ihracat ve ithalat toplamının GDP’deki payı Veri kaynağı: World Bank Development Indicators
Kamu Harcamalarının GDP’deki Payı (GOV)	Genel olarak hükümetin, mal ve hizmet alımları için (devlet çalışanlarının tazminatı dahil) gerçekleştirdiği nihai tüketim harcamalarının tamamını içerir. Ayrıca, ulusal savunma ve güvenlik harcamalarının büyük çoğunluğunu kapsarken, sermaye oluşumunun bir parçası olan hükümetin askeri harcamalarını içermez. Veri Kaynağı: theglobaleconomy database

İlgili literatür incelendiğinde, yapılan çalışmalarda yoksullukta ortaya çıkan değişimlerin göstergesi olarak birçok farklı parametrenin kullanıldığı görülmektedir. Kurulan modelde Sehrawat ve Giri (2015), Uddin vd. (2014) ve Dhrifi (2015) gibi çalışmaları takiben yoksulluğun azalması göstergesi olarak hanehalkı nihai tüketim harcamalarının GDP’deki payı kullanılmıştır. Ayrıca modelde yer alan GDP², ekonomik büyümeye bağlı olarak gerçekleşen gelir artışının POV üzerindeki etkisinin değişen zaman periyodunda görebilmek amacıyla eklenmiştir.

Bu çerçevede yapılan analizin ilk aşamasında, panel grubunu oluşturan yatay kesitler arasında ekonomik, politik ve sosyal alanlarda bağımlılık olup olmadığının sınaması yapılmaktadır. Yatay kesit sınamasında Pesaran (2004) tarafından geliştirilen CD testi uygulanmaktadır. CD testi hesaplamasında, her birimin kendisi dışında kalan tüm birimlerle korelasyonu hesaplanmakta ve N birim boyuttaki korelasyon sayısı, N*(N-1) kadar hesaplanmaktadır.

Dengeli panel için CD testi;

$$CD = \sqrt{\left(\frac{2T}{N(N-1)}\right) \sum_{i=1}^{N-1} \sum_{j=i+1}^N (\hat{\rho}_{ij} - 1)} \sim N(0,1) \quad (2)$$

şeklinde hesaplanmaktadır.

$$\hat{\rho}_{ij} = \hat{\rho}_{ij} = \frac{\sum_{t=1}^T e_{it} e_{jt}}{(\sum_{t=1}^T e_{it}^2)^{1/2} (\sum_{t=1}^T e_{jt}^2)^{1/2}} \quad (3)$$

denklemler ile tanımlanır. e_{it} her birimin tahmin edilen kalıntısı. T_{ij} korelasyon ilişkisinde gözlem sayısını göstermektedir (Tatoğlu, 2017: 105-106).

Yatay kesit bağımlılığı testi sonrasında, seriler için homojenlik testinin uygulanması gerekmektedir. Homojenlik testi sınavında, Swamy (1970) tarafından geliştirilen testten faydalanılmıştır. Bu testte, kesitler arasında homojen bir ilişki olduğunu gösteren temel hipotez;

$$H_0: \beta_1 = \beta_2 = \dots = \beta_N = \beta \text{ şeklinde kurulmaktadır (Swamy, 1970: 320).}$$

serilerin birim kök sınavında yatay kesit bağımlılığının olmaması ve heterojenlik özelliği göstermesine bağlı olarak ikinci grup birim kök testlerinden Im, Pesaran ve Shin (2003) tarafından geliştirilen IPS birim kök testinden faydalanılmıştır. IPS testi, y_{it-1} 'in heterojen katsayısını baz alıp, yatay kesitlerin heterojenliğine izin verip, bireysel bağlamda elde edilen birim kök testi istatistiklerinin ortalamasına dayalı olarak hesaplanan alternatif bir birim süreci ifade etmektedir (Baltagi, 2005: 242).

Değişkenler arasında uzun ve kısa dönemli ilişkinin analiz edilmesinde Pesaran vd. (1999) tarafından geliştirilen, havuzlanmış grup tahmincisi (pooled mean grup-PMG) ve grup tahmincisi (mean grup-MG) olmak üzere iki farklı tahmincisi bulunan Panel ARDL yönteminden faydalanılmıştır. (1) nolu modelin panel ARDL denklemi;

$$\ln(POV)_{it} = \alpha_i + \sum_{j=1}^p \beta_{ij} \ln(POV)_{it-j} + \sum_{j=0}^l \gamma_{ij} \ln(FDI)_{it-j} + \sum_{j=0}^q \delta_{ij} \ln(GDP)_{it-j} + \sum_{j=0}^k \varphi_{ij} \ln(GDP^2)_{it-j} + \sum_{j=0}^m \phi_{ij} \ln(INF)_{it-j} + \sum_{j=0}^n \mu_{ij} \ln(TRADE)_{it-j} + \sum_{j=0}^p \theta_{ij} \ln(GOV)_{it-j} + \varepsilon_{it} \quad (4)$$

şeklinde yazılmaktadır. Burada yer alan $i=1,2,3,\dots,N$ yatay kesit sayısını, $t=1,2,3,\dots,T$ ise zaman boyutunu ifade etmektedir. Ayrıca, Panel ARDL modelinin hata düzeltme formları ise aşağıdaki şekilde ifade edilebilir:

$$\Delta(\ln(POV))_{it} = \alpha_i + \beta'_i \ln(POV)_{it-1} + \gamma'_i \ln(FDI)_{it} + \delta'_i \ln(GDP)_{it} + \varphi'_i \ln(GDP^2)_{it} + \phi'_i \ln(INF)_{it} + \mu_i \ln(TRADE)_{it} + \theta_i \ln(GOV)_{it} + \sum_{j=1}^{p-1} \beta''_{ij} \Delta \ln(POV)_{it-j} + \sum_{j=0}^{l-1} \gamma''_{ij} \Delta \ln(FDI)_{it-j} + \sum_{j=0}^{q-1} \delta''_{ij} \Delta \ln(GDP)_{it-j} + \sum_{j=0}^{k-1} \varphi''_{ij} \Delta \ln(GDP^2)_{it-j} + \sum_{j=0}^{m-1} \phi''_{ij} \Delta \ln(INF)_{it-j} + \sum_{j=0}^{n-1} \mu''_{ij} \Delta \ln(TRADE)_{it-j} + \sum_{j=0}^{p-1} \theta''_{ij} \Delta \ln(GOV)_{it-j} + \varepsilon_{it} \quad (5)$$

(5) nolu modelde birinci farklarının üzerine konan parametreler kısa dönemli ilişkiyi, β'_i katsayısı ise hata düzeltme modelinin katsayısını temsil etmektedir.

3. Bulgular

1980-2017 yılları arasındaki seçilmiş ülkelerde yoksulluk göstergesi ile finansal gelişme arasındaki ilişkinin analiz edilmesinin amaçlandığı ampirik analiz kısmının ilk aşamasında panel grubunu oluşturan yatay kesitler arasındaki bağımlılığı gösteren CD testi uygulanmaktadır. Elde edilen yatay kesit analizi bulguları Tablo 2'de yer almaktadır.

Tablo 2. Yatay Kesit Bağımlılığı ve Homojenlik Testleri

Yatay Kesit Bağımlılığı Testi	CD Test		Olasılık				
	- 0.732		1.5356				
Homojenlik Testi							
	LnPOV	LnFDI	LnGDP	LnGDP ²	LnINF	LnTrade	LnGOV
Test İstatistiği	4232.75	2561.88	135.23	110.88	244.31	5045.18	5336.82
Olasılık Değeri	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Tablo 2'de yer alan yatay kesit testi bulgularına göre, seriler arasında bağımlılık söz konusu değildir. Diğer bir ifadeyle, örnekleme yer alan kesitlerin herhangi birinde ortaya çıkan bir etki diğer kesitlere yansımamaktadır. Ayrıca Tablo 2'de değişkenler için yapılan homojenlik testi bulguları da yer almaktadır. Buna göre, serilerin tamamı bireysel olarak heterojenlik özelliğine

sahiptir. Yatay kesit bağımlılığı olmadığı ve heterojenlik özelliği taşıyan seilerin birim kök sınavında kullanılan IPS testi bulguları Tablo 3'te yer almaktadır.

Tablo 3. Birim Kök Testi Sonuçları

Düzyey Seviyede	(a)	(b)	1. Farkında	(a)	(b)	Karar
LnPOV	0.680	0.795	Δ LnPOV	-11.510***	-10.061***	I(1)
LnFDI	-0.392	0.010	Δ LnFDI	-11.005***	-9.539***	I(1)
LnGDP	0.226	-0.874	Δ LnGDP	-6.322***	-4.958***	I(1)
LnGDP ²	2.453	-1.136	Δ LnGDP ²	-6.465***	-4.945***	I(1)
LnINF	-1.977**	-0.381	Δ LnINF	-	-	I(0)
LnTRADE	-	-4.022***	Δ LnTRADE	-	-	I(0)
	3.544***					
LnGOV	-	-2.089**	Δ LnGOV	-	-	I(0)
	2.694***					

Not: a ve (b) sütunları sırasıyla, sabit, sabit+trend koşullarını göstermektedir. *,** ve ***, sırasıyla %10, %5 ve %1 düzeyinde anlamlılığı ifade etmektedir.

Tablo 3'de yer alan bulgulara göre kurulan modelde yer alan değişkenlerden LnPOV, LnFDI, LnGDP ve LnGDP² değişkenleri düzeyde birim kök içerirken farkı alınarak durağan hale gelmiştir [I(1)]. Modelde yer alan diğer değişkenlerden LnINF, LnTrade ve LNGOV ise düzey seviyede durağanlık içermektedir [I(0)]. Değişkenlerin farklı seviyelerde durağanlık göstermesine bağlı olarak değişkenler arasındaki uzun ve kısa dönemli ilişkinin tahmin edilmesinde kullanılan Panel ARDL/PMG testi sonuçları Tablo 4'te verilmektedir.

Tablo 4. Panel ARDL/PMG Tahmin Sonuçları

Model:	Uzun Dönem		Kısa Dönem	
ARDL(1,1,1,1,1,1)				
Değişkenler (Bağımlı Değişken: POV)	Katsayı	Olasılık	Katsayı	Olasılık
FDI	-0.099	0.0044***	0.039	0.3481
GDP	0.033	0.0002***	1.841	0.2189
GDP ²	-0.003	0.0001***	-0.120	0.1792
INF	0.054	0.0002***	-0.001	0.5054
TRADE	0.146	0.0067***	-0.033	0.3883
GOV	0.178	0.0013***	-0.117	0.3527
Sabit Terim			0.603	0.0128
Hausman Testi	7.62(0.267)	ECT(-1)	-0.216(0.0.01)	Gözlem Sayısı: 456
Chi² (Olasılık)				Ülke Sayısı:12

Not: *,**,***, %10, %5 ve %1 düzeyinde anlamlılığı ifade etmektedir.

Elde edilen Hausman testi sonuçlarının olasılık değerlerinin %5'ten büyük olması dolayısıyla Panel ARDL/PMG sonuçlarının yorumlanması gerektiği ortaya çıkmaktadır. Ayrıca elde edilen sonuçlara göre, finansal gelişmişlik endeksi ve GDP'deki belirli bir eşik değeri sonrasında ortaya çıkan artış, hanehalkı nihai tüketim harcamalarının GDP'deki payını azaltmaktadır. Bu durum bahsi geçen değişkenlerin yoksulluğu arttırdığını göstermektedir. Belirli bir eşik değeri sonrasında GDP'deki artışın hanehalkı nihai tüketim harcamalarını azaltıcı yönde etki yaratması yoksulluğun azalması ile GDP arasında ters-U şeklinde bir ilişki olduğunu göstermektedir. GDP, INF, TRADE ve GOV değişkenlerinden kaynaklı bir artış ise hanehalkı nihai tüketim harcamalarının GDP'deki payını arttırarak yoksulluğu azaltmaktadır

Sonuç ve Değerlendirme

1980'lerden itibaren finansal gelişme olgusunun makroekonomik göstergeler üzerindeki etkisi yoğun biçimde araştırılmaya başlanmıştır. McKinnon (1973) ve Shaw (1973) tarafından finansal

gelişmenin büyüme kanalıyla ilişkilendirilen pozitif yönü neticesinde finansal gelişme-büyüme ilişkisine yönelik geniş bir araştırma kümesi oluşmuştur. Son dönemlerde ise finansal gelişmenin büyüme üzerindeki olumlu etkisinin öne çıkarıldığı yaklaşımlarda finansal gelişmenin sağladığı büyüme ve diğer kanalların eşitsizlik ve yoksulluk üzerindeki etkisi [Greenwood & Jovanovic (1990)] önem kazanan diğer husus olmuştur. Bu gelişmelerden yola çıkarak 1980-2017 dönemi verileriyle seçilmiş MENA ülkeleri (Cezayir, Bahreyn, Mısır, İran, İsrail, Ürdün, Kuveyt, Malta, Fas, Suudi Arabistan, Tunus ve Türkiye) için finansal gelişme-yoksulluk ilişkisi panel ARDL yöntemiyle test edilmiştir. Elde edilen panel ARDL sonuçları incelendiğinde, finansal gelişmenin artışına paralel olarak yoksulluğun da artmaya başladığı görülmektedir. Bunun yanında kişi başı gayrisafi yurtiçi hasıla arttıkça yoksulluk azalmakta; fakat belirli bir gelir seviyesinden sonra yoksulluk artmaya başlamaktadır. Dolayısıyla GDP ile POV arasında ters-U şeklinde ilişki söz konusu olmaktadır. Bu durum yoksulluğun azaltılması hususunda gelir düzeyinde belirli seviye sonrasında ortaya çıkan artışın hanehalkları arasında eşit bir dağılım göstermediğini ifade etmektedir. Diğer değişkenlerin yoksulluk üzerindeki etkisi incelendiğinde ise GDP, INF, TRADE ve GOV değişkenlerindeki artışın hanehalklarının nihai tükümlerinin GDP'deki payını ifade eden yoksulluğun azalmasını sağladığı bulgusuna ulaşılmaktadır.

Sonuçların genel bir değerlendirmesi yapıldığında, seçilen ülkelerde finansal gelişmenin yoksulluğu arttırdığı görülmektedir. Bu çerçevede, finansal gelişmenin sağlanması hususunda yoksul kesimi de kapsayan boyutta bir finansal derinliğin sağlanması gerektiği açıktır. Ekonomik büyüme ve finansal işlemlerden elde edilen gelir düzeyinin yoksul kesime adil bir şekilde dağıtılması da gerekli tasarruf birikiminin sağlanması hususunda oldukça önemlidir. Bu doğrultuda kapsayıcı bir finansal gelişmenin altyapısının sağlanmasında, finansal kanalların çeşitliliği, güvenliği ve erişilebilirliğini desteklemeye yönelik politikaların uygulanması gerektiği söylenebilir.

Kaynakça

- Abdin, J. (2016). Financial development and poverty reduction: Exploring the links between the issues using evidence from Bangladesh. *International Journal of Financial Research*, 7(4), 44-65.
- Arestis, P., & Caner, A. (2005). Financial liberalization and poverty: channels of influence. In *Financial Liberalization* (pp. 90-128). Palgrave Macmillan, London.
- Baltagi, B. (2005), *Econometric Analysis of Panel Data*, Third Edition, John Wiley & Sons, BRICS Joint Statistical Publication, Durban, South Africa.
- Belen, M., & Karamelikli, H. (2016). Finansal Gelişme Ve Yoksulluğun Azalması Arasındaki İlişki: Ampirik Bir İnceleme. *Bolu Abant İzzet Baysal Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 16(1), ss.125-141.
- Ben Naceur, S., Boubakri, N., & Ghazouani, S. (2008). Privatization and Financial Market Development: A Comparison Between Mena Countries and Other Regions. *Economic Research Forum*, Working Paper No.390
- Boukhatem, J. (2016). Assessing the direct effect of financial development on poverty reduction in a panel of low-and middle-income countries. *Research in International Business and Finance*, 37, 214-230.
- Chemli, L. (2014). The nexus among financial development and poverty reduction: an application of ARDL approach from the MENA region. *Journal of Life Economics*, 1(2), 133-148.
- Claessens, S., & Feijen, E. (2007). Financial sector development and the millennium development goals. *The World Bank*, Washington, DC. pp. 1-106.
- Dewi, S., Majid, M. S. A., & Kassim, S. (2018). Dynamics of financial development, economic growth, and poverty alleviation: The Indonesian experience. *South East European Journal of Economics and Business*, 13(1), 17-30.
- Dhrifi, A. (2015). Financial development and the "Growth-Inequality-Poverty" triangle. *Journal of the Knowledge Economy*, 6(4), pp.1163-1176.
- Donou-Adonsou, F., & Sylwester, K. (2016). Financial development and poverty reduction in developing countries: New evidence from banks and microfinance institutions. *Review of Development Finance*, 6(1), pp.82-90.

-
- Easterly, W. & Fischer, S. (2001), Inflation and the Poor. *Journal of Money, Credit and Banking*, 33(2), pp. 160-78.
- Fowowe, B., & Abidoye, B. (2013). The effect of financial development on poverty and inequality in African countries. *The Manchester School*, 81(4), pp. 562-585.
- Greenwood, J., & Jovanovic, B. (1990). Financial development, growth, and the distribution of income. *Journal of political Economy*, 98(5, Part 1), pp. 1076-1107.
- Hassan, A. K., & Islam, M. R. (2005). Temporal causality and dynamics of financial development, trade openness, and economic growth in Vector Auto Regression (VAR) for Bangladesh, 1974-2003: Implication for poverty reduction. *Journal of Nepalese Business Studies*, 2(1), pp. 1-12.
- Im, K. S., Pesaran, M. H., & Shin, Y. (2003). Testing for unit roots in heterogeneous panels. *Journal of econometrics*, 115(1), 53-74.
- IMF (2020), <https://www.imf.org/en/Data>. Erişim Tarihi: 14. 02. 2020.
- Jalilian, H., & Kirkpatrick, C. (2005). Does financial development contribute to poverty reduction?. *Journal of development studies*, 41(4), 636-656.
- Jeanneney, S. G., & Kpodar, K. (2011). Financial development and poverty reduction: can there be a benefit without a cost?. *The Journal of development studies*, 47(1), pp. 143-163.
- Kar, M., Agir, H., & Peker, O. (2011a). Financial development and poverty reduction in Turkey. Department of Economics, Adana, Çukurova University, Turkey, pp. 681-703.
- Kar, M., Nazlıoğlu, Ş., & Ağır, H. (2011b). Financial development and economic growth nexus in the MENA countries: Bootstrap panel granger causality analysis. *Economic modelling*, 28(1-2), 685-693.
- Khan, M.S. & Senhadji, A. (2000). Financial Development and Economic Growth: An Overview, IMF Working Paper No. 00/209, Available at SSRN: <https://ssrn.com/abstract=880870>
- McKinnon, R. I. (1973). Money and capital in economic development (Washington, DC: Brookings Institution). McKinnon Money and Capital in Economic Development.
- Odhiambo, N. M. (2010a). Financial deepening and poverty reduction in Zambia: an empirical investigation. *International journal of social economics.*, 37(1), pp. 41-53.
- Odhiambo, N. M. (2010b). Is financial development a spur to poverty reduction? Kenya's experience. *Journal of Economic Studies*. 37(3), pp. 343-353.
- Perez-Moreno, S. (2011). Financial Development and Poverty in Developing Countries: A Causal Analysis. *Empirical Economics*, 41, pp. 57-80.
- Pesaran, M. (2004), General Diagnostic Tests for Cross Section Dependence in Panels, CESifo Working Paper Series, No. 1229; IZA Discussion Paper No. 1240.
- Pesaran, M. H., Shin, Y., & Smith, R. P. (1999). Pooled mean group estimation of dynamic heterogeneous panels. *Journal of the American statistical Association*, 94(446), pp. 621-634.
- Pradhan, R. P. (2010). The nexus between finance, growth and poverty in India: The cointegration and causality approach. *Asian Social Science*, 6(9), pp. 114-122.
- Rewilak, J. (2017). The role of financial development in poverty reduction. *Review of development finance*, 7(2), pp. 169-176.
- Sehrawat, M., & Giri, A. K. (2016). Financial development, poverty and rural-urban income inequality: evidence from South Asian countries. *Quality & Quantity*, 50(2), 577-590. pp. 577-590.
- Shaw, E. S. (1973), *Financial Deepening in Economic Development*, Oxford University Press, New York.
- Swamy, P. A. (1970). Efficient Inference in A random Coefficient Regression Model. *Econometrica*, 38(2), 311-323
- Stiglitz, J. (1993). The role of the state in financial markets. The World Bank. In Annual Conference on Development Economics, Washington DC, mai., pp. 19-52.
- Tatoğlu, F. Y. (2017). Panel Zaman Serileri Analizi. Beta Yayınları. İstanbul.
- Theglobaleconomy.com (2020), <https://www.theglobaleconomy.com/download-data.php>. Erişim Tarihi: 02. 02. 2020.
-

-
- Uddin, G. S., Shahbaz, M., Arouri, M., & Teulon, F. (2014). Financial development and poverty reduction nexus: A cointegration and causality analysis in Bangladesh. *Economic Modelling*, 36, pp. 405-412.
- World Bank (2020), <https://databank.worldbank.org/home.aspx>. Erişim Tarihi: 02. 02. 2020.
- Zahonogo, P. (2017). Financial development and poverty in developing countries: evidence from Sub-Saharan Africa. *International Journal of Economics and Finance*, 9(1), pp. 211-220.
- Zhang, R., & Naceur, S. B. (2019). Financial development, inequality, and poverty: Some international evidence. *International Review of Economics & Finance*, 61, pp. 1-16.
- Zhuang, J., Gunatillake, H., Niimi Y., Khan, M.E., Jiang, Y., Hasan, R., Khor, N., Lagman-Martin, A.S., Bracey P. & Huang, B., (2009). Financial Sector Development, Economic Growth, and Poverty Reduction: A Literature Review, Asian Development Bank Economics Working Paper Series, Working Paper Series No. 173.

Extended Abstract

Aim and Scope

There has been an increasing interest in the impact of financial development on poverty in developing countries. Considering the mechanisms by which financial development affects poverty, many opinions are put forward in this area, but more emphasis is placed on the fact that financial development affects poverty through two different channels, directly and indirectly. According to the direct effect, it is predicted that poverty will decrease with the increase in access to financial resources of the poor with financial development, while the indirect effect is realized through economic growth (Abdin, 2016: 45). In this study, the 1980-2017 period selected MENA countries (Algeria, Bahrain, Egypt, Iran, Israel, Jordan, Kuwait, Malta, Morocco, Saudi Arabia, Tunisia and Turkey) the relationship between financial developments and poverty.

Methods

The share of inflation, openness and public expenditures in the GDP was added to the model established to determine the relationship between poverty and financial development in selected countries. For this purpose, firstly, the dependency between the cross-sections forming the series was tested with the CD test proposed by Pesaran (2004). After the cross section dependency test, the homogeneity test developed by Swamy (1970) was applied for the series. In the unit root test of the series, IPS unit root test was used. In analyzing the long and short term relationship between variables, developed by Pesaran et al. (1999) the Panel ARDL method was used.

Findings ve Conclusion

According to the Panel ARDL Boundary Test results, financial development increases poverty in the long run. In addition, there is an Inverse-U relationship between economic growth and poverty. Among the other variables in the model established, inflation, openness and increase in public expenditures reduce poverty.

Bağımsız Denetim Kalitesi Konusunda Ulusal ve Uluslararası Dergiler Üzerine Bibliyometrik Bir Araştırma

A Bibliometric Research on National and International Journals on Audit Quality

Öz

Son yıllarda muhasebe literatüründe hızla değişen ve gelişim gösteren konulardan birisi de denetim kalitesidir. Her ne kadar bu konu sıklıkla ele alınsa da kavramın tanımı üzerinde ortak bir noktaya ulaşılamadığı görülmektedir. Bu doğrultuda çalışmanın amacı, muhasebe ve denetim alanındaki ulusal ve uluslararası dergilerde yayınlanan 2016-2020 yılları arasında denetim kalitesi konusuna yönelik yapılan çalışmaları genel olarak değerlendirmektir. Çalışmada, muhasebe ve denetim alanında makalelerin yayınlandığı uluslararası dergilerden Journal of Accounting, Auditing and Finance, Journal of Accounting, Finance and Auditing Studies (JAFAS), Journal of International Accounting, Auditing and Taxation, Accounting, Auditing and Accountability Journal, Journal of Accounting, Auditing and Performance Evaluation ile ulusal dergilerden Muhasebe ve Finansman (MUFAD), Muhasebe Bilim Dünyası (MÖDAV), Muhasebe ve Denetim Bakış ve Mali Çözüm'de yer alan bağımsız denetim kalitesini konu alan toplam 30 makale değerlendirilmiştir. Dergilerde yer alan makaleler öncelikle ampirik ve teorik olarak sınıflandırılmıştır. Ayrıca çalışmalarda denetim kalitesini etkileyen ve denetim kalitesinin etkilediği faktörler ele alınmıştır. Çalışma sonuçlarına göre, denetim kalitesi konusunda yayınlanan makalelerin büyük çoğunluğunun yurtdışındaki dergilerde yayınlandığı ve konunun daha çok ampirik olarak ele alındığı, ampirik çalışmaların da genel olarak borsada kayıtlı şirketler üzerinde yapıldığı, verilerin toplanmasında anket tekniğinin kullanıldığı ve analiz yöntemi olarak regresyon analizinin kullanıldığı görülmektedir.

Abstract

It is the issue of audit quality, which is one of the rapidly changing and developing subjects in the accounting literature in recent years. Although this issue is frequently addressed, it is seen that a common point is not reached on the definition of the concept. In this direction, the aim of the study is to generally evaluate the studies on audit quality between 2016-2020 published in national and international journals in the field of accounting and auditing. Journal of Accounting, Auditing and Finance, Journal of Accounting, Finance and Auditing Studies (JAFAS), Journal of International Accounting, Auditing and Taxation, Accounting, Auditing and Accountability Journal, Journal of Accounting, Auditing. A total of 30 articles on audit quality in the journals Accounting and Finance (MUFAD), Accounting Science World (MÖDAV), Accounting and Auditing Overview and Financial Solution were evaluated. Articles in journals are primarily classified as empirical and theoretical. In addition, the factors that affect the audit quality and which are the factors that affect the audit quality are also discussed in the studies. According to the results, it is seen that the majority of the articles published on audit quality are published in foreign journals and the subject is mostly dealt with empirically, and empirical studies are generally carried out on companies listed in the stock exchange, the survey technique is used to collect the data and regression analysis is used as the analysis method.

Giriş

Bibliyometri, temelde yayınların konu, yazar, yayın bilgisi ve atıf çeşitliliği gibi özellikleri açısından niceliksel bir şekilde incelenmesini içeren bir bilim dalıdır (Al ve Coştur, 2007: 144). Bir alana yönelik yapılan çalışmaların nicelik ve nitelik yönünden değerlendirilmesinde önemli rol oynayan bibliyometrik analiz, belirli bir zamanda belgelerin veya yayınların yer aldığı dergi, yazar,

Gülşah Dönmez

Gümüşhane Üniversitesi, Sosyal Bilimler Enstitüsü, gulsah.donmez2525@gmail.com, ORCID ID: 0000-0003-0150-6452

Büşra Tosunoğlu

Doç. Dr., Gümüşhane Üniversitesi, İİBF, busra.tosunoglu@gumushane.edu.tr, ORCID ID: 0000-0001-6292-2770

Selim Cengiz

Doç. Dr., Çankırı Karatekin Üniversitesi, İİBF, scengiz@karatekin.edu.tr, Orcid: 0000-0002-2013-9590

Article Type / Makale Türü

Research Article / Araştırma Makalesi

Anahtar Kelimeler

Denetim, Bağımsız Denetim Kalitesi, Bibliyometrik Analiz

Keywords

Audit, Independent Audit Quality, Bibliometric Analysis

Bilgilendirme

Bu makale, 03-05 Aralık tarihlerinde Gümüşhane'de gerçekleşen Uluslararası Bilimsel Araştırmalar Kongresi'nde bildiri olarak sunulmuştur.

Submitted: 10 / 12 / 2020

Accepted: 30 / 12 / 2020

konu ve içerik gibi özelliklerini incelemek için kullanılan bir yöntemdir (Law ve Cheung, 2008: 79). Bibliyometrik analiz ile farklı alanlarda yapılan çalışmaların kalite ve bilimsel performans açısından değerlendirmesinin yapılması adına özellikle son yıllarda bu analizin yapıldığı çalışmalar önem kazanmaktadır (Al, 2008: 264).

Belirli bir alana yönelik gerçekleştirilen çalışmaların belirli bir döneme ilişkin incelenmesi ve değerlendirilmesi ilgili literatür açısından oldukça önemlidir (Kozak, 2000:16). Bibliyometrik analiz, bilimsel dergilerin niteliklerinin belirlenmesi açısından en sık kullanılan bir teknik olarak karşımıza çıkmaktadır.

Bu çalışmanın amacı ulusal ve uluslararası muhasebe alanındaki dergilerde yayınlanan bağımsız denetim kalitesi konusuna yönelik yapılan çalışmaların değerlendirilmesini yapmaktır. Bu doğrultuda muhasebe alanında makalelerin yer aldığı Journal of Accounting, Auditing and Finance, Journal of Accounting, Finance and Auditing Studies (JAFAS), Journal of International Accounting, Auditing and Taxation, Accounting, Auditing and Accountability Journal, Journal of Accounting, Auditing and Performance Evaluation ile Muhasebe ve Finansman (MUFAD), Muhasebe Bilim Dünyası (MÖDAV), Muhasebe ve Denetim Bakış ve Mali Çözüm dergilerinde 2016-2020 yılları arasında yayınlanan bağımsız denetim kalitesi konusunda toplam 30 makale değerlendirilmiştir. Söz konusu makalelerin dergilere göre dağılımı, konuyu ampirik ya da teorik olarak ele alış biçimleri, ampirik çalışmalarda kullanılan örneklem, veri toplama yöntemi ve kullanılan analiz yöntemi incelenmiştir. Son olarak ampirik makalelerin içeriği incelenerek denetim kalitesi ile ilişkilendirilen faktörler de belirlenmiştir.

Çalışmada ilk olarak bibliyometrik analize ilişkin literatür araştırmasına yer verilmiştir. Daha sonra ise muhasebe alanında ulusal ve uluslararası dergilerde yayınlanan bağımsız denetim kalitesine yönelik çalışmalar ampirik ve teorik olarak ayrıma tabi tutularak detaylı incelenmiştir.

1. Bibliyometrik Çalışmalara Yönelik Literatür Araştırması

Literatürde bibliyometrik analiz yöntemiyle ilgili ilk çalışma 1917 yılında Cote ve Eales tarafından 1550-1860 yılları arasında karşılaştırmalı anatomi alanında yapılmıştır (Hotamışlı ve Erem, 2014: 3). Türkiye’de ise ilk çalışma 1970 yılında bilimsel verimliliğin ölçülmesi amacıyla ‘Growich in Turkish Positive Basic Sciences’ olarak Özinönü tarafından yapılmıştır (Al, 2008: 10). Bibliyometrik çalışmalara yönelik literatür incelendiğinde ulusal ve uluslararası pek çok çalışma yer almaktadır. Literatürde yer alan bu çalışmaların uluslararası ve ulusal olarak ayrımı yapılarak Tablo 1’de uluslararası, Tablo 2’de ise ulusal literatür sunulmuştur.

Tablo 1. Uluslararası Literatür

Yazarlar / Yıl	Araştırma Bulguları	Araştırma Sonuçları
Alexander ve Mabry (1994)	Finansal alanda yayın yapan dergilerdeki makaleleri alana olan katkıları açısından incelemişlerdir.	Sonuçlara göre finans alanında en fazla makalenin Journal of Finance’de yer aldığını ve en fazla atfın da bu dergide yer alan çalışmalara yapıldığını ifade etmişlerdir.
Jacobs ve Ingversen (2000)	1981-1996 yılları arasında Güney Afrika’daki on üniversitede fizik, kimya, biyokimya-mikrobiyoloji ve bitki-hayvan bilimleri bölümündeki çalışan yazarların yaptıkları yayınlarını incelemişlerdir.	Sonuç olarak araştırmacıların akademik konumu ve deneyimi ile çalışmaların verimliliği arasında doğrusal bir ilişki olduğunu ifade etmişlerdir.
Jacobs ve Davis (2001)	1992-1996 yılları arasında Science Citation Index (SCI) ve Social Sciences Citation Index (SSCI)’da en fazla aranan dergilerde yer alan makaleleri yazarların cinsiyeti açısından incelemişlerdir.	Sonuçlara bakıldığında araştırma kapsamındaki makalelerin büyük çoğunluğunun erkek yazarlara ait olduğunu ifade etmişlerdir.
Hazarika (2005)	2000-2002 yıllarını kapsayan Journal of Forestry’de yer alan 252 adet makaleyi bibliyometrik özellikleri yönünden incelemiştir.	Sonuç olarak makalelerde 3798 adet atf değerlendirilmiş ve atfların büyük çoğunluğunun makaleler olduğu tespit edilmiştir.
Cardoso vd (2007)	Brezilya’da 2002-2005 yılları arasında muhasebe alanında yüksek lisans programlarında pozitif muhasebe	Sonuçlarda yüksek lisans programlarında pozitif muhasebe teorisinin kullanılmasının akademik çalışmalara da yansıtıldığını ve bu

	teorinin kullanımını incelemek amacıyla bilimsel etkinliklerde yayınlanan akademik çalışmaları incelemiştir.	teorinin derslerde konu edilmesinin akademik çalışmalara pozitif bir etkisinin olduğunu ifade etmişlerdir.
Heradio vd. (2016)	Literatürde eğitim alanında en çok araştırma yapılan konuları belirleyerek yayınların kaynakları ve yazarların üretkenlikleri açısından incelemiştir.	Sonuç olarak eğitim alanında en fazla uygulamalı eğitimlerin önemine yönelik makalelerin yer aldığını ifade etmişlerdir.
Balstad ve Berg (2019)	1945-2018 yılları arasında Web of Science ve Scopus'ta en çok taranan dergilerde yayınlanan yönetim muhasebesi alanındaki çalışmaları atıf çeşitliliği açısından bibliyometrik analiz yapmışlardır.	Sonuçlara bakıldığında yönetim muhasebesi alanında en fazla atıf yapılan beş derginin toplam atıflar içindeki payının yüksek olduğu ve en fazla atıf yapılan derginin Accounting, Organization and Society (AOS) olduğu tespit edilmiştir.
Biancone vd. (2020)	İslami bankacılık ve finans alanında 16980-2020 yılları arasında yayınlanan 7662 makaleyi bibliyometrik özellikleri açısından incelemiştir.	Çalışma sonucunda araştırma kapsamında 7662 makalenin tespit edildiği ve söz konusu makalelerde genel olarak oranlar ve karşılaştırmalar üzerinde odaklanıldığını ifade etmişlerdir.

Tablo 2. Ulusal Literatür

Yazarlar/Yıl	Araştırma Bulguları	Araştırma Sonuçları
Önce ve Başar (2010)	2000-2008 yılları arasında Türkiye'deki akademik araştırma dergilerinde muhasebe alanında yapılan çalışmaları bibliyometrik özellikleri açısından incelemiştir.	Çalışma sonucunda makaleleri 10 kategoriye ayırarak finansal muhasebe, maliyet ve yönetim muhasebesi ve muhasebe standartları konularında en fazla makalenin yayınlandığını ve en fazla makalenin de Mali Çözüm, MÖDAV, MUFAD ve Muhasebe ve Denetime Bakış dergilerinde yayınlandığını tespit etmişlerdir.
Polat vd. (2013)	2005-2012 yılları arasında Atatürk üniversitesi İktisadi ve İdari Bilimler Dergisi'nde yer alan 434 adet makaleyi incelemiştir.	İncelenen 434 makalenin 550 farklı yazar tarafından yazıldığını, yazar başında düşen makale sayısının 1,26 olduğunu, makalelerin neredeyse tamamının akademisyenler tarafından yazıldığını ve yardımcı doçent ve araştırma görevlisi unvanına sahip yazarların daha fazla yayın yaptıklarını çalışma sonucunda ifade etmişlerdir.
Hotamışlı ve Erem (2014)	2005-2013 yılları arasında Muhasebe ve Finansman Dergisi'nde yayınlanan 562 makaleyi konu, atıf ve yayın yeri gibi bibliyometrik özellikleri açısından incelemiştir.	Sonuçlara bakıldığında finansal performans, kamu ekonomisi ve finansal piyasalar konularının çalışmalarda daha fazla yer aldığını ve en fazla yayın yapan kurumların Marmara, Trakya ve İstanbul Üniversitesi olduğunu ayrıca en fazla atıfın dergilerden yapıldığını tespit etmişlerdir.
Akgün ve Karataş (2017)	2000-2016 yılları arasında Muhasebe ve Denetime Bakış Dergisi'nde yayınlanan 380 makaleyi konu, yayın yeri ve atıf gibi bibliyometrik özellikleri yönünden incelemiştir.	Araştırmaların konularına bakıldığında maliyet-yönetim muhasebesi ve denetime daha çok ağırlık verildiğini, dergiye katkısı en fazla olan kurumların Dokuz Eylül, Ankara ve Gazi Üniversitelerinin olduğunu ve atıfların daha çok yerli kaynaklardan yapıldığını çalışma sonucunda ifade etmişlerdir.
Şen vd. (2017)	Türkiye'de yayınlanan muhasebe dergilerinde 2009-2015 yılları arasında yayınlanan makaleleri yayın sayısı ve yazar gibi özellikleri açısından bibliyometrik analiz yapmışlardır.	Sonuçlara bakıldığında 2013 yılında muhasebe alanında en az makalenin yayınlandığı ve en fazla çalışmanın MÖDAV'da yayınlandığı tespit edilmiştir. Ayrıca yazar özelliklerine göre bakıldığında en fazla yardımcı doçent unvanına sahip yazarların çalışma yaptıkları da görülmektedir.
Öztürk ve Yılmaz (2018)	1960-2018 yılları arasında denetim ve adli muhasebe alanında yapılan Social	Sonuçlara bakıldığında son yıllarda bu alana verilen önem doğrultusunda yapılan

	Sciences Citation Index (SSCI)'da taranan çalışmaları incelemiştir.	yayımların da artış gösterdiği ifade etmişlerdir.
Temelli ve Karcioğlu (2018)	Muhasebe ve Vergi Uygulamaları Dergisi'nde 2010-2017 yılları arasında yayınlanan 123 makaleyi makale sayısı, yazarlar, kullanılan yöntem ve atıf çeşitliliği gibi bibliyometrik özellikler açısından incelemiştir.	Çalışma sonuçlarında 123 makalenin 171 farklı yazar tarafından yayınlandığını, en fazla yayın yapan yazarların Tuğba Uçma Uysal (Muğla Sıtkı Koçman Üniversitesi) ve Ganite Kurt (Gazi Üniversitesi) olarak takip ettiğini, en fazla yayının Gazi Üniversitesi'nde görev yapan akademisyenler tarafından yapıldığını ve yayınlanan makalelerin çoğunluğunun nitel/teorik olduğunu ifade etmişlerdir.
Tosunoğlu vd. (2018)	2017 yılında muhasebe alanında en fazla makalenin yer aldığı ulusal ve uluslararası muhasebe eğitimi konusunda yayınlanan 79 makaleyi bibliyometrik özellikleri açısından incelemiştir.	Sonuçlara bakıldığında muhasebe eğitimi konusunda yapılan çalışmaların çoğunluk kısmının yurtdışında yayınlanan dergilerde yer aldığını, kullanılan örneklemin genel olarak öğrencilerden oluştuğunu, araştırma verilerinin toplanmasında çoğunlukla anket tekniğinin kullanıldığını ve analiz yöntemi olarak regresyon analizini kullandıklarını ifade etmişlerdir.
Kayakıran ve Doğan (2019)	2008-2019 yılları arasında Maliye ve Finans Yazıları Dergisi'nde yayınlanan çalışmaları makale sayısı, yazar sayısı, yazarların cinsiyeti ve unvan gibi özellikleri açısından incelemiştir.	Sonuçlara göre 186 adet makalenin 315 yazar tarafından yazıldığını, çalışma başına düşen yazar sayısının 1,69 olduğunu, yazarların çoğunluğunu erkeklerin oluşturduğunu ve yazarların çoğunluğunun Dr. Öğretim üyesi unvanına sahip olduğunu ifade etmişlerdir.

Tablo 1 ve 2'ye bakıldığında bibliyometrik analizin genel olarak makaleler üzerinde yapıldığı ve az sayıda çalışmanın bilimsel etkinliklerde sunulan çalışmalara ve yayınlanan tezlerle yönelik olduğu görülmektedir. Çalışmaların içeriğine bakıldığında ise büyük çoğunluğunun yayımların yazarları, konuları ve atıf çeşitliliğine yönelik olduğunu söylemek mümkündür.

2.Yöntem

Bu çalışmada nicel araştırma yöntemlerinden olan bibliyometrik analiz tekniği kullanılmıştır. Bibliyometrik analiz tekniği literatürde zamanla önem kazanmaya başlamıştır. Araştırmacıların yapmış oldukları yayımların gelişim düzeylerinin ve bilime olan katkılarının değerlendirilmesine de imkân sağlamıştır (Samiee ve Chabowski, 2012: 369).

Bu çalışmanın amacı muhasebe ve denetim alanında makalelerin yer aldığı ulusal ve uluslararası dergilerde 2016-2020 yılları arasında yayınlanan makaleleri bibliyometrik analiz tekniği kullanılarak incelemektir. Araştırmada cevapları aranan sorular aşağıda yer almaktadır.

- Makalelerin yayınlandığı dergilere göre dağılımı nedir?
- Makalelerin ampirik ve teorik açıdan içerik dağılımı nedir?
- Makalelerin kullanılan örneklem grubuna göre dağılımı nedir?
- Makalelerin kullanılan veri toplama yöntemine göre dağılımı nedir?
- Makalelerin toplanan verilerin analiz edilmesinde kullanılan yöntemlere göre dağılımı nedir?

3. Bulgular

Çalışmada muhasebe denetimi alanında çalışmaların yer aldığı ulusal ve uluslararası dergilerde 2016-2020 yılları arasındaki yayımları incelenmiştir. Tablo 3'te yer alan dergilerde, bağımsız denetim kalitesi konusuna yönelik olan makaleler tespit edilmiştir. Bu doğrultuda dergilerde incelenen toplam 1674 makaleden 30 tanesinin bağımsız denetim kalitesine yönelik olduğu görülmektedir. İlgili makalelerin yayınlandığı dergilere göre dağılımı Tablo 3'te sunulmaktadır.

Tablo 3. Makalelerin Yayınlandığı Dergilere Göre Dağılımı

Dergi İsmi	Toplam Makale Sayısı	Seçilen Makale Sayısı
Journal of Accounting, Auditing and Finance	131	4
Journal of Accounting, Finance and Auditing Studies	80	2
Journal of International Accounting, Auditing and Taxation	88	6
Accounting, Auditing and Accountability Journal	381	2
Journal of Accounting, Auditing and Performance Evaluation	72	5
Muhasebe ve Finansman (MUFAD)	326	5
Muhasebe Bilim Dünyası (MÖDAV)	260	3
Muhasebe ve Denetime Bakış	152	2
Mali Çözüm	184	1
TOPLAM	1674	30

Tablo 3'te görüldüğü gibi bağımsız denetim kalitesiyle ilgili en fazla çalışmanın yer aldığı uluslararası dergi "Journal of International Accounting, Auditing and Taxation (6)"dir. Türkiye'de yayınlanan dergilere bakıldığında ise çok fazla yayın Muhasebe ve Finansman Dergisi'ne aittir (5).

İncelenen dergilerde yer alan makalelerin içeriğine bakıldığında ise denetim kalitesi konusunu 28 çalışmanın ampirik, 2 çalışmanın ise teorik olarak ele aldığı Tablo 4'te görülmektedir.

Tablo 4. Dergilerde Yayınlanan Makalelerin İçeriği

Dergi İsmi	Ampirik	Teorik
Journal of Accounting, Auditing and Finance	4	0
Journal of Accounting, Finance and Auditing Studies	2	0
Journal of International Accounting, Auditing and Taxation	6	0
Accounting, Auditing and Accountability Journal	1	1
Journal of Accounting, Auditing and Performance Evaluation	4	1
Muhasebe ve Finansman (MUFAD)	5	0
Muhasebe Bilim Dünyası (MÖDAV)	3	0
Muhasebe ve Denetime Bakış	2	0
Mali Çözüm	1	0
TOPLAM	28	2

Dergilerde yer alan bağımsız denetim kalitesine yönelik teorik olarak ele alan 2 çalışmanın içeriğine bakıldığında ise denetim kalitesinin bir işletme için neyi ifade ettiği ve 1980-2010 yılları arasında 30 yılda literatürde denetim kalitesi kavramının nasıl değiştiği incelenmiştir. Konuyu ampirik olarak ele alan çalışmalar ise örneklem, veri toplama ve analiz yöntemi açısından değerlendirilmiş olup Tablo 5'te sunulmaktadır.

Tablo 5. Dergilerde Yayınlanan Ampirik Makalelerin Genel Özellikleri

Örneklem	Borsaya Kayıtlı Şirketler	18
	Denetçiler	6
	Denetim Firmaları	3
	Bankalar	1
Veri Toplama Yöntemi	Birincil	17
	İkincil	10
	Röportaj	1
Analiz Yöntemi	Regresyon Analizi	16
	Ki-kare Analizi	8
	Farklılık Analizi	2
	Yapısal Eşitlik Modeli	1
	Faktör Analizi	1

Tablo 5'te bakıldığında incelenen çalışmaların büyük çoğunluğunun borsada kayıtlı şirketlere yönelik yapıldığı, veri toplama yöntemi olarak birincil veri yöntemlerinden anket tekniğinin kullanıldığı ve elde edilen verilerin analizinde regresyon analizinin kullanıldığı görülmektedir.

Bağımsız denetim kalitesi konusunu ampirik olarak ele alan ve uluslararası dergilerde yayınlanan çalışmaların içeriğine bakıldığında ise aşağıda yer alan faktörlerin bağımsız denetim kalitesi üzerindeki etkisinin analiz edildiği görülmektedir.

- ✓ Bilgi Teknoloji Kontrolleri
- ✓ Lobcilik Hizmetleri
- ✓ Denetçinin Görev Süresi
- ✓ Denetim Süresi
- ✓ Denetçi Değişikliği
- ✓ Denetim Firması Rotasyonu
- ✓ Müşteri Şirketin Sahiplik Yapısı
- ✓ Müşteri Şirketin Yönetim Kalitesi
- ✓ Müşteri Şirketin Firma Özellikleri
- ✓ Denetim Firması Birleşmeleri
- ✓ Denetçilere Uygulanan İdari İşlemler
- ✓ Firma Değeri
- ✓ Finansal Performans
- ✓ Kazanç Yönetimi Riski
- ✓ Borçlanma Riski
- ✓ Gerçeğe Uygun Değerin Bilgi Kalitesi
- ✓ Yöneticilerin ve Ortakların Algıları

Bağımsız Denetim
Kalitesi

Benzer şekilde ulusal dergilerde yer alan çalışmalarda ise, aşağıda yer alan faktörlerin bağımsız denetim kalitesi üzerindeki etkisinin analiz edildiği görülmektedir.

- ✓ Yaratıcı Muhasebe Uygulamaları
- ✓ Zorunlu Rotasyon
- ✓ Finansal Raporlama Kalitesi
- ✓ Gömülü Denetim Firması Değişiklikleri
- ✓ Denetçinin Bağımsızlığı
- ✓ Denetçinin Mesleki Şüphesizliği
- ✓ Denetçinin Mesleki Özellikleri
- ✓ Kurumsal Yönetim Uygulamaları

Bağımsız Denetim
Kalitesi

Sonuç ve Değerlendirme

Son yıllarda denetim kalitesi konusunun çalışmalarda sıklıkla konu edilmeye başlamasına rağmen günümüzde hala bu kavram için ortak bir tanımın olmaması araştırmacıları bağımsız denetim kalitesi ile ilişkilendirebilecekleri faktörleri incelemeye yöneltmiştir. Bu doğrultuda çalışmada 2016-2020 yılları arasında muhasebe alanında ulusal ve uluslararası alanda makalelerin yer aldığı 9 dergide yer alan çalışmalar bibliyometrik analiz tekniği kullanılarak incelenmiştir.

Yapılan inceleme sonucunda denetim kalitesi konusuna yönelik 30 makale tespit edilmiş ve ilgili çalışmaların 19 tanesinin uluslararası dergilerde 11 tanesinin ise ulusal dergilerde yayımlandığı tespit edilmiştir. Çalışmaların türüne bakıldığında ise 28 makalenin konuyu ampirik olarak 2 makalenin ise teorik olarak incelediği belirtilmiştir. Bu durumda çalışmaların neredeyse tamamının konuyu ampirik olarak ele aldığını söylemek mümkündür. Araştırma kapsamında incelenen ampirik makaleler; örneklem, veri toplama ve analiz yöntemine göre değerlendirildiğinde araştırmaların genel olarak borsada kayıtlı şirketler üzerinde yapıldığı, veri toplama yöntemi olarak anket tekniğinin ve regresyon analizinin kullandığı belirtilmiştir.

Konuyu teorik olarak inceleyen makalelerin içeriğine bakıldığında ise denetimde kalite kavramının ne anlama geldiği ve denetim kalitesine yönelik görüşlerin nasıl değiştiği incelenmiştir.

Araştırma kapsamında incelenen ampirik çalışmaların içeriğine bakıldığında ise, uluslararası dergilerde yer alan makalelerde bilgi teknoloji kontrollerinin, denetim süresinin, denetçinin görev süresinin, müşteri şirketin sahiplik yapısının, müşteri şirketin yönetim kalitesinin ve müşteri şirketin firma özelliklerinin denetim kalitesi üzerinde pozitif bir etkiye sahipken; lobcilik hizmetlerinin, denetçi değişikliğinin, denetim firması rotasyonunun, denetim firması

birleşmelerinin ve denetçilere uygulanan idari işlemlerin denetim kalitesi üzerinde negatif bir etkiye sahip olduğu tespit edilmiştir. Ayrıca denetim kalitesini bağımsız değişken olarak ele alan çalışmalarda denetim kalitesinin firma değeri, finansal performans, yöneticilerin ve ortakların algıları ve gerçeğe uygun değerlerin bilgi kalitesi üzerinde pozitif; kazanç yönetimi risk ve borçlanma riski üzerinde negatif bir etkiye sahip olduğu görülmektedir.

Benzer şekilde ulusal dergilerde yer alan ampirik çalışmalarda ise, zorunlu rotasyonun, finansal raporlama kalitesinin, denetçinin mesleki özelliklerinin, denetçinin mesleki şüpheliğinin, denetçinin bağımsızlığının ve kurumsal yönetim uygulamalarının denetim kalitesi üzerinde pozitif bir etkiye sahipken; gömülü denetim firması değişikliklerinin denetim kalitesi üzerinde negatif bir etkiye sahip olduğu sonucuna ulaşıldığı görülmektedir. Ayrıca denetim kalitesini bağımsız değişken olarak ele alan çalışmada denetim kalitesinin finansal performans üzerinde pozitif bir etkiye sahip olduğu da incelenmiştir.

Çalışmalar genel olarak değerlendirildiğinde, denetim kalitesi ile ağırlıklı olarak denetçinin özellikleri, denetim firması değişiklikleri ve müşteri işletmenin yönetimine ait özelliklerin ilişkilendirildiği görülmektedir. Son olarak, ampirik çalışmalarda denetim kalitesini ölçmeye yönelik anket tekniği dışında denetçinin görev üresi, uzmanlığı, eğitimi, raporda yer alan görüşü ve denetim firmasının büyüklüğü gibi kriterlerin kullanıldığını da söylemek mümkündür.

Bu çalışma, bağımsız denetim kalitesine yönelik gerek ulusal gerekse uluslararası dergilerde yayınlanan çalışmaların konu, kapsam ve yöntem açısından incelenmesini içermektedir. Gelecek çalışmalarda ise yurtdışında farklı ülkelerde denetim firmaları, işletmeler ve denetçilere yönelik yapılan çalışmalarda test edilen bağımsız denetim kalitesine ilişkin modeller kullanılarak farklı çalışmalar da yapılabilir.

Kaynakça

- Akgün, M., & Karataş, B. (2017). Muhasebe ve denetime bakış dergisinde yayımlanan makalelerin bibliyometrik analizi (2000-2016). *Muhasebe ve Denetime Bakış*, 52, 19-34.
- Al, U. (2008). Türkiye'nin bilimsel yayın politikası: atıf dizinlerine dayalı bibliyometrik bir yaklaşım, yayınlanmamış doktora tezi, Hacettepe Üniversitesi Sosyal Bilimler Enstitüsü, Ankara.
- Al, UO., & Coştur, R. (2007). Türk psikoloji dergisi'nin bibliyometrik profili. *Türk Kütüphaneciliği Dergisi*, 21(2), 142-163.
- Alexander, J., Mabry, C., & Rodney, H. (1994). Relative significance of journals, authors and articles cited in financial research. *The Journal of Finance*, 49(2), 697-712.
- Balstad, M. T., & Berg, T. (2019). A long-team bibliometric analysis of journals influencing management accounting and control research, *Journal of Management Control*, 30, 357-380.
- Biancone, P. P., Denisa, B. S., & Chmet, P. F. (2020). The bibliometric analysis of Islamic banking and finance. *Journal of Islamic Accounting and Business Research*, 10, 1-18.
- Cardoso, R. L, Oyadomari, J. C. T., & Neto, O. R. M. (2007). The influence of positive accounting in postgraduate programs in accounting: a bibliometric analysis of Brazilian academic production from 2002 through 2005. *Brazilia Business Review*, 4(2), 149-161.
- Hazarika, T. (2005). Information use pattern of indian forestry scientists: a bibliographic study. *Annals of Library and Information Studies*, 52(2), 68-75.
- Heradio, R., Torre, L., Galan, D., Cabrerizo, F. J., Viedma, E. H., & Dormino, S. (2016). Virtual and remote labs in education: a bibliometric analysis, *Computers & Education*, 98, 14-38.
- Hotamışlı, M., & Erem, I. (2014). Muhasebe ve finansman dergisi'nde yayınlanan makalelerin bibliyometrik analizi. *Muhasebe ve Finansman Dergisi*, 63, 1-20.
- Jacobs, D., & Ingwersen, P. (2000). A bibliometric study of the publication patterns in the sciences of south African scholars 1981-96. *Scientometrics*, 47(1), 75-93.
- Jacobs, D., & Davis, M. (2001). A bibliometric study of the publication patterns of scientists in south Africa 1992- 96. 8th International Conference on Scientometrics and Informetrics, Sydney, Australia, 275-285.
- Kayakıran, D., & Doğan, S. (2019). Maliye ve finans yazıları dergisi'nde yayımlanmış makalelerin bibliyometrik analizi (2008-2019). *Ekonomi Maliye İşletme Dergisi*, 2(2), 92-102.

- Law, R., & Cheung, P. (2008). An analysis of publications in leading tourism journals and its implications. *Journal of China Tourism Research*, 4(1), 78- 97.
- Önce, S., & Başar, B. (2010). Türkiye’deki akademik araştırma dergilerinde muhasebe alanında yazılmış makalelerin analizi:2000-2008. *Muhasebe ve Finansman Dergisi*, 45, 55-68.
- Öztürk, S., & Yılmaz, C. (2018). Denetim ve adli muhasebe alanındaki çalışmaların bibliyometrik analiz tekniği ile incelenmesi. *Karadeniz Uluslararası Bilimsel Dergi*, 39(39), 173-188.
- Polat, C., Sağlam, M. & Sarı, T. (2013). Atatürk Üniversitesi iktisadi ve idari bilimler dergisi’ nin bibliyometrik analizi. *Atatürk Üniversitesi İktisadi ve İdari Bilimler Dergisi*, 27(2), 273-288.
- Samiee, S., & Chabowski, B. R. (2012). Knowledge structure in international marketing: a multi-method bibliometric analysis. *Journal of the Academy of Marketing Science*, 40(2), 364-386.
- Selimoğlu, S. K., Aslan, Ü. & Güvenli, B. (2009). 12. dünya muhasebe tarihi kongresinde sunulan türk akademisyenler ve uygulamacıların bildirimleri: bir literatür incelemesi. *Muhasebe ve Finansman Dergisi*, 42, 217-228.
- Şen, İ. K., Hatunoğlu, Z. & Terzi, S. (2017). Muhasebe araştırmalarında muhasebe eğitiminin yeri ve önemi: muhasebe dergileri üzerinde bibliyometrik bir araştırma. *Muhasebe Bilim Dünyası Dergisi*, 19(1), 247- 291.
- Temelli, F., & Karcıoğlu, R. (2018). Muhasebe ve vergi uygulamaları dergisinde yayınlanan makalelerin bibliyometrik analizi: 2010-2017 dönemi. *Muhasebe ve Vergi Uygulamaları Dergisi*, 11(2), 242-268.
- Tosunoğlu, B., Cengiz, S., & Anadolu, Z. (2018). Muhasebe eğitimi konusunda ulusal ve uluslararası dergiler üzerine bibliyometrik bir araştırma. *Küresel İktisat ve İşletme Çalışmaları Dergisi*, 7(14), 18-24.

Extended Abstract

Aim and Scope

The purpose of this study is to evaluate the studies on independent audit quality published in national and international accounting journals. In this direction, *Journal of Accounting, Auditing and Finance*, *Journal of Accounting, Finance and Auditing Studies (JAFAS)*, *Journal of International Accounting, Auditing and Taxation*, *Accounting, Auditing and Accountability Journal*, *Journal of Accounting, Auditing A* total of 30 articles on independent audit quality published between 2016-2020 in the journals *Accounting and Finance (MUFAD)*, *Accounting Science World (MÖDAV)*, *Accounting and Auditing Overview* and *Financial Solution* were evaluated with and Performance Evaluation. The distribution of the aforementioned articles according to journals, their empirical or theoretical approach to the subject, the sample used in empirical studies, the data collection method and the analysis method used were examined. Finally, by examining the content of empirical articles, factors associated with audit quality were also determined.

Methods

The bibliometric analysis technique, one of the quantitative research methods, was used in this study. Bibliometric analysis technique has started to gain importance in the literature over time. It also enabled the evaluation of the development levels of the publications made by the researchers and their contribution to science (Samiee and Chabowski, 2012: 369).

The aim of this study is to examine the articles published between 2016-2020 in national and international journals with the highest number of articles in the field of accounting and auditing, using bibliometric analysis technique. The questions whose answers are sought in the research are listed below.

- What is the distribution of articles according to the journals they were published in?
- What is the empirical and theoretical content distribution of the articles?
- What is the distribution of articles according to the sample group used?
- What is the distribution of articles according to the data collection method used?
- What is the distribution of articles according to the methods used in analyzing the collected data?

Conclusion

Although the subject of audit quality has been frequently used in studies in recent years, the lack of a common definition for this concept has led researchers to examine the factors that they can associate with independent audit quality. In this direction, the studies in 9 journals that have the most national and international articles in the field of accounting between 2016-2020 were examined using bibliometric analysis technique.

As a result of the examination, 30 articles on audit quality were identified and it was determined that 19 of the related studies were published in international journals and 11 in national journals. When looking at the type of studies, it was stated that 28 articles examined the subject empirically and 2 articles theoretically. In this case, it is possible to say that almost all of the studies deal with the subject empirically. Empirical articles examined within the scope of the research; When the sample was evaluated according to the data collection and analysis method, it was stated that the researches were generally carried out on companies registered in the stock exchange, and the survey technique and regression analysis were used as the data collection method.

Considering the content of the articles that examine the subject theoretically, the meaning of the concept of quality in audit and how the views on audit quality have changed were examined.

Considering the content of the empirical studies examined within the scope of the research, while information technology controls, audit duration, auditor's tenure, client company's ownership structure, client company's management quality and client company characteristics have a positive effect on the audit quality; It has been determined that lobbying services, auditor change, audit firm rotation, audit firm mergers and administrative procedures applied to auditors have a negative effect on audit quality. In addition, in studies that consider audit quality as an independent variable, audit quality is positive on firm value, financial performance, perceptions of managers and partners, and fair value on information quality; earnings management appears to have a negative effect on risk and borrowing risk.

Similarly, in empirical studies in national journals, while mandatory rotation, financial reporting quality, auditor's professional qualifications, auditor's professional skepticism, auditor's independence and corporate governance practices have a positive effect on audit quality; It is concluded that the changes in the embedded audit firm have a negative effect on audit quality. In addition, in the study, which treats audit quality as an independent variable, it was also examined that audit quality has a positive effect on financial performance.

When the studies are evaluated in general, it is seen that audit quality is predominantly associated with the characteristics of the auditor, audit firm changes and the characteristics of the client enterprise management. Finally, in empirical studies, it is possible to say that besides the survey technique for measuring the audit quality, criteria such as the auditor's duty, expertise, training, opinion in the report and the size of the audit firm are used.

This study includes the examination of studies on independent audit quality published in national and international journals in terms of subject, scope and method. In future studies, different studies can be done by using models on independent audit quality that are tested in studies conducted for audit firms, businesses and auditors abroad.

Afet Bilinci ve Kader İlişkisi: Gümüşhane Örneği
Disaster Consciousness and Belief in Fate: Gümüşhane Example

Öz

Afet; bir toplumu derinden sarsan, ciddi can ve mal kayıpları yaşatan doğal veya insan kaynaklı olaylardır. Ülkemizde meydana gelen çeşitli afetlerden dolayı içinde bulunduğumuz coğrafyada insanlar sürekli afet riski altındadır. Toplumun dini inancı gereği afetlerin meydana gelme sebebi bazıları tarafından kader olarak değerlendirilir. Ancak tüm yaşanan felaketler kader olsa bile dinimizin öğretisi sırtımızı kadere yaslamak değil tedbirli olmayı göstermektedir. Afetlerin kadersel ilişkisi ile ilgili olarak literatürde çok az çalışma vardır. Çalışmamızın amacı bu ilişki düzeyi ile ilgili yeni araştırmalara yol açarak bölgemizde gerçekleşen afetlerin çeşitliliği ve sıklığı sebebiyle afet öncesi, sonrası ve sonrası yapılacak faaliyetleri bilen daima afet bilincine sahip birey olan toplum oluşturmaktır.

Bu araştırma, Gümüşhane’de yaşayan bireylerin afet konusunda bilgi ve bilinç düzeyleri ile kader inançları arasındaki ilişki düzeyleri ve afete ne kadar hazır oldukları üzerinedir.

Çalışmamız Gümüşhane ilinde ikamet eden 385 kişi ile yüz yüze yapılan görüşmelerde afet bilinci ile kader inançları arasındaki ilişki kavranmaya çalışılarak, kader inancının afet bilinç düzeylerini ne derece etkilediği ve katılımcıların ne düzeyde afet bilincine sahip oldukları ölçülmeye çalışılmıştır. Afet bilinci ile kader ilişkisi, sorulan üç soruda tespit edilmiş olup genel anlamda bir ilişki tespit edilememiştir. Elde edilen bulgular SPSS 20 paket programında analiz edilerek yorumlanmaya çalışılmıştır.

Abstract

Disaster is nature or human-induced events devastating a society deeply and causing serious death and loss of property. Due to the variety of disasters occurring in Turkey, people are under constant disaster risk in this region where they reside. In compliance with the religious beliefs of the society, it is considered by some that the reason lying behind the occurrence of disasters is simply by fate. However, even though all disasters are caused by fate, the teachings of Islam suggest not to rely solely on fate but to be cautious. There are very few studies in the literature regarding the relationship between fate and disasters. The aim of our study is to create a society with disaster conscious individuals who know which activities need to be done before, during and after the disaster occurred due to the diversity and frequency of disasters in our region by leading to new researches regarding with this relationship level.

This research is based on the relationship level between knowledge and consciousness levels in disaster and fate beliefs of individuals residing in Gumushane and concerned with how ready they are for disaster.

Striving to have insights into disaster consciousness and beliefs in fate, this study intends to measure to what extent belief affects disaster consciousness level and at what level participants have disaster consciousness through face to face surveys with 385 participants residing in Gümüşhane. Disaster consciousness and fate relationship were identified by three questions asked and a relation could not have been found in general terms. The findings were meant to be interpreted by analyzing through SPSS 20 package program.

Giriş

Tarih boyunca insanlık afetlerle mücadele etmiştir. Bir kısım toplum afetlerin etkisiyle tarihten silinmiş, arkeologların ve tarihçilerin çalışmaları ile de yaşanan felaketler gün yüzüne çıkarılmıştır.

Mazhar Oyanık

Dr., Gümüşhane Üniversitesi,
moyanik@gumushane.edu.tr, Orcid:
<https://orcid.org/0000-0003-0437-9436>

Ekrem Cengiz

Prof. Dr., Gümüşhane Üniversitesi,
ekremcengiz@gumushane.edu.tr Orcid:
<https://orcid.org/0000-0003-2427-5554>

Article Type / Makale Türü

Research Article / Araştırma Makalesi

Anahtar Kelimeler

Afet, Afet Bilinci, Kader, Afet Bilinci ile Kader İlişkisi

Keywords

Disaster, Disaster Consciousness, Fate, Disaster Consciousness and Belief in Fate

JEL: E69,E60, E65

Bilgilendirme

Bu makale "Afet Bilinci ve Kader İlişkisi: Gümüşhane Örneği" adlı yüksek lisans tezinden türetilmiş olup Tiflis 2019 Uluslararası Bilimsel Araştırmalar Kongresinde sunulan bildirinin genişletilmiş halidir

Submitted: 11 / 12 / 2020

Accepted: 31 / 12 / 2020

İnsanlık yaşamını etkileyen bu felaketler günümüzde yaşanmaya devam etmektedir ve edeceği beklenmektedir. Bunlardan kimi önlenebilirken kimi de etkisi azaltılabilir ya da önlenemeyebilir türlerdendir. Durum böyle olunca insanlar, yaşamlarını etkileyen bu afetlere karşı bekleyip görmek yerine bir dizi faaliyetler içinde olarak davetsiz gelebilecek afetlerle mücadele içinde olmalıdır. İşte bu bağlamda insanların afetler için girişeceği mücadele ve faaliyetler dizisi afet bilincini oluşturmaktadır.

İnsanların felaketler karşısında savunmasız olması afet bilincinin önemini arttırmaktadır. Şüphesiz insanlar doğada en savunmasız varlık olarak yaratılmıştır. Ancak mevcut akılları bu eksikliği gidererek diğer canlılardan daha güçlü ve korunaklı yapabilmektedir. Bu bağlamda aklı kullanmak insanların zayıflığını güçlü kılabilmektedir. İnsan akıllı ve şuurlu bir varlıktır. Kur' an' da bazı ayetler de Allahu teala, "Ben size akıl vermedim mi?" diye sorarak insanları düşündürmekte ve bu gerçeği bildirmektedir. Her ne kadar yaşadığımız ve yaşayacağımız olaylar "kader" kavramı ile ilgili olsa da Allahu teala her şeyi kadere yüklemememizi, yaşadıklarımızın kendi fiillerimizle kazandıklarımızı belirtmektedir. Bazı hadislerde ise tedbirli olmanın önemi vurgulanmış, tevekkülün alınacak tedbirlerden sonra olması gerektiği anlatılmaya çalışılmıştır. Bu anlattıklarımızdan anlaşılacağı üzere bize düşen olayları salt teslimiyetçilikle karşılamak yerine aklımızı kullanarak afetlere her daim hazırlıklı olup önlemlerimizi aldıktan sonra tevekkül etmektir. Felaketler olmadan evvel gerekli tedbirleri almalıyız. Yoksa geldikten sonra hiçbir şey fayda vermemektedir.

Yaşanan felaketlerden ülkemizde on binlerce insan yaşamını yitirmekte, yüzbinlerce insan mağduriyet yaşamaktadır. Toplumun kalkınma ve gelişmişlik düzeyini etkileyerek ekonomik kayıplar yaşatmakta, bireylerin psikoloji ve sağlığını etkileyerek yaşam düzenlerini bozmaktadır.

1. Afet Kavramı ve Türleri

Afet sözcüğü köken olarak Arapça bir kelime olup, kimi yerlerde "büyük felaket, bela, yıkım" şeklinde ifade edilmektedir (Yılmaz, 2003:1). Her doğa olayını afet olarak kabul etmek doğru değildir. Doğa olaylarının yol açtığı negatif sonuçlar bu olayları afete yönelten öğelerdir. Bu bağlamda salt doğa olayı neticesi ile değil insan odaklı nedenlerle gerçekleşen olay afet boyutunu kazanmaktadır. Şöyle ki; mimari yapılar depreme dayanıklı yapılsalardı yaşanan orta şiddetli bir deprem sonucu bina yıkımı olmayacak ve afetten söz edemeyecektik. Burada asıl düşünülmesi gereken afetlerin doğa olayları ile değil, insan faktörünün etkisi ile boyut kazanmasıdır. O halde afetlere insan faktörlü bir vakıa da denilebilir [Dombrowsky, 1998:24-25]

Birleşmiş Milletler Afet Azaltma ve Strateji (United Nations International Strategy for Disaster Reduction - UNISDR) afeti; etkilenen toplumun, kendi kaynaklarını kullanarak mücadele etme kabiliyetini aşan geniş ölçüde insan, malzeme ve doğal kayıplara sebep olan, toplumun işleyişindeki ciddi bir bozulma olarak tanımlamıştır [<http://www.unisdr.org/>]. Ayrıca bir olayın afet sayılabilmesi için üç önemli durumun varlığından bahsetmiştir. Bunlar aşağıdaki şekilde sıralanmaktadır:

- 1-Belli bir topluluğun günlük hayatının normal işleyişi bozulmalıdır,
- 2-Etkilenen topluluk afetin yarattığı yıpratıcı ve bozucu etkilerle mücadele edememelidir,
- 3-Dışsal bir müdahale olmadan normal işleyiş kendi kendine geri gelmeyecek düzeyde olmalıdır [Abdallah ve Burnham, 2000]

İnsanlar, doğa olayları üzerinde çok büyük bir etkide bulunmamasına rağmen doğa olaylarının etkisini azaltmada rol oynayabilirler. Bir doğa olayı ile öngörülemeyen bir afeti yönetemeyebiliriz fakat etkileme boyutunu azaltarak önleyici tedbirler alabiliriz. Örneğin sağlam yapılaşma yoluyla depremin etkileri, barajlar ve dere yatağı ıslahlarıyla sel baskını etkileri azaltabiliriz [<http://www.jhsph.edu/>]. Afet yönetiminin önemi insan odağında gerekli olup etkili ve verimli bir yönetim ile can ve mal kayıplarını azaltabilir hatta önleyebiliriz. Buradan "Afet Yönetimi Nedir?" sorusuna, karşılaşılan bir afetin araştırma, gözlemlene ve planlama yaparak etki alanını minimize etmeye ve önlemeye yönelik hazırlıkların tamamlanmasına çözüm sunmaya çalışan bir disiplindir şeklinde cevap verebiliriz [Ergünay, 1998:37].

Afetlerin kaynağı yönünden iki türü vardır. Doğal afetler ve insan kaynaklı (doğal olmayan) afetlerdir. Ancak erozyon, deprem vs. gibi doğal olan ama insan faktörünün etkisiyle afet boyutu artan afetler vardır. Literatürde bu afetler doğal kaynaklı afetlerde değerlendirilmektedir.

Doğal olmayan afetler ise insan ve teknolojik kaynaklı (terör, sivil kargaşa, endüstriyel kazalar, KBRN kazaları gibi) olan afetlerdir. İnsanın direkt etkisiyle olan bu afetlerin önlenilebilir olması doğal afetlerden ayrılan en önemli özelliğidir. Afetlerin, etki kaynağını oluşturduğu faktör bazlı ayırım Tablo 1.' de gösterilmiştir.

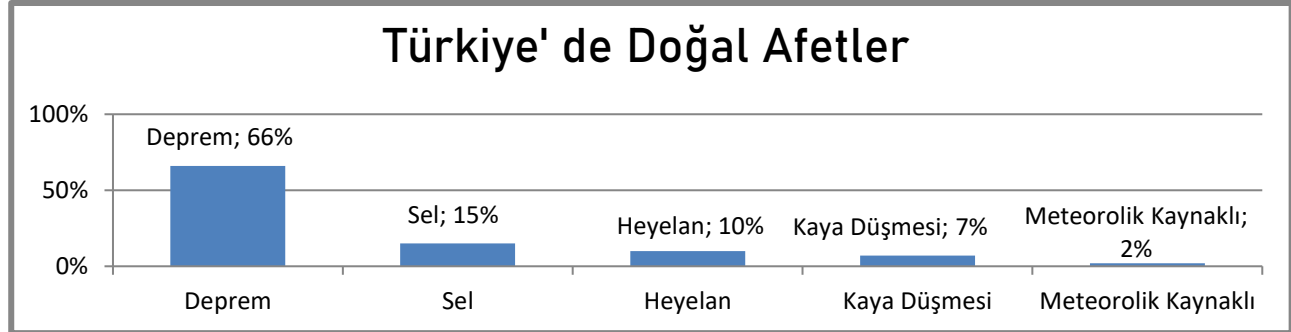
Tablo 1. Afet Türleri ve Etki Faktörler

Doğal Kaynaklı Afetler	İnsan Faktörü Etkisiyle Oluşan Afetler	Doğrudan İnsanların Sebep Olduğu Afetler
Tropik fırtınalar	Ormansızlaşmadan kaynaklı toprak kaymaları	Savaş ve terör olayları
Sel baskınları	Kıtlık	Endüstriyel olaylar: Patlamalar, tehlikeli maddeler ve kirlilik
Kuraklık	Çölleşme	Taşımacılık kazaları
Aşırı sıcak ya da soğuk		
Volkanlar		
Depremler		
Heyelanlar		

Kaynak: Johns Hopkins Bloomberg School of Public Health, <http://www.jhsph.edu>, (15.06.2015).

Doğal afet, genellikle insan kontrolü dışında ve gerekli önlemler alınmadığında büyük ölçüde can ve mal kayıplarına sebebiyet verebilecek doğa olaylarıdır (Louhisuo ve diğerleri, 2007:246). Bu olaylar çok kısa sürelerde gerçekleşebilen ve başladıktan sonra insanlar tarafından engellenemeyen doğa olaylarıdır (Kutluay, 2014).

Ülkemizin yer şekillerinin yüksek, eğimli ve fay hatları üzerinde olması doğal afet potansiyelinin de yüksek olmasına sebep olmaktadır. Yukarıda belirtilen afetlerin bir kısmı ülkemiz dışında görülmekte iken Türkiye’de meydana gelen doğal afetler Grafik 1.’ de de gösterildiği gibi %66’sı depremlerden, %15’ini sellerden, %10’unu toprak kaymasından (heyelan), %7’si kaya düşmesinden ve %2’si de meteorolojik kaynaklardan oluşmaktadır (Genç, 2007:204).



Grafik 1. Türkiye’ de Doğal Afetler

2. Gümüşhane Özelinde Afetler

Gümüşhane ili sınırları içerisinde 1979 yılında 5 şiddetinde ve 1985 yılında 5.1 şiddetinde depremler olmuştur Erzincan’da 1939 yılında yaşanan 7.9 büyüklüğündeki deprem ile 1992 yılında meydana gelen 6.8 büyüklüğündeki deprem ilimizde de hissedilmiştir. Ayrıca 2008 yılı ile 2010 yılları arasında Köse, Kelkit ve Şiran ilçelerini de kapsayan alanda büyüklükleri 2.6 ile 3.3 arasında değişen küçük depremler meydana gelmiştir [<http://jeofizik.gumushane.edu.tr>].

Sel felaketleri genelde Gümüşhane merkezinde ve çevre köylerinde yaşansa da farklı zamanlarda Kelkit, Torul ve Şiran ilçelerinde de olmuştur. Geçmişte 1890 ile 1910 yılları arasında sekiz sel felaketi olayı yaşanmıştır [Demir ve Aktaş, 2015:23-31]. Gümüşhane’de sel olaylarında genel sebep yağış rejimidir. Ayrıca yükselti, yamaç eğimleri, drenaj sistemleri gibi coğrafi etkenler yanında yanlış arazi kullanımı, dere yatakları civarında yanlış yapılaşma gibi beşeri etkenlerde sebep olmaktadır [Gümüşhane İl Afet ve Acil Durum Müdürlüğü, Afet Raporu].

Gümüşhane ilinin güney taraflarında heyelan risk azdır. Heyelanların genelde ilin merkezinden kuzeyde bulunan Giresun iline doğru olan alanlarda görülmektedir. Bu alanlarda fazla yamaç eğimi yanı sıra kayaç yapılarının da fazla aşınmış olması risk düzeyini daha da arttırmaktadır. Ayrıca bu riskin yüksek olmasında fazla yağışların olmasıyla birlikte zeminin suya doygunluğunun artması ve kayganlaştırmayı kolaylaştırmasıdır [Bayrak ve diğerleri, 2010:5]. Heyelan raporlarına göre heyelanın yaşanmasında yağışların %99 oranında etken olduğu belirtilmiştir [Bayrak ve diğerleri, 2010:11]. Heyelan oluş nedenleri ise %42 suyun etkisi, %26 ayrışma, %26 kazı, %4 bitki değişmesi ve %2 'de diğer sebeplerin olduğu görülmüştür [Bayrak ve diğerleri, 2010:3].

Bir diğer afet olan çığ, Torul ve Kürtün ilçeleri ile Gümüşhane merkezinde açılması planlanan kayak merkezi çığ için riskli alanlar olduğu tespit edilmiştir [http://gumushane.afad.gov.tr]. Gümüşhane'de şüana kadar yaşanmış en feci çığ felaketi 2009 yılında Torul ilçesine bağlı Köstere Köyü mevkiinde Zigana Dağında yaşanmıştır. Burada yaşanan çığ felaketi sonucu on yedi dağcıdan on dağcı ölmüş ve yedisi ise yaralanmıştır [Gümüşhane İl Afet ve Acil Durum Müdürlüğü, Afet Raporu].

Kaya düşmesi olayları, Gümüşhane merkez ile Kürtün, Torul, Şiran ve Kelkit ilçelerine bağlı köylerde meydana gelmiştir. Yaşanan bu olaylarda can kayıpları yaşanmamış olup risk taşıyan bölgelerde konutların nakli önerilmiştir [Gümüşhane İl Afet ve Acil Durum Müdürlüğü, Afet Raporu].

3. Afet Yönetimi ve Aşamaları

3.1. Afet Yönetimi

Afet yönetimi, afetlerde ve acil durumlarda kontrolü elde tutmak, hayati risk altındaki insanlara yardım sağlamak, kısaca, bir afetin etkisinden kaçınmak ya da afetle meydana gelen olumsuzlukları düzeltmek için tasarlanmış faaliyetlerin tamamıdır. Afet yönetiminin amacı; bireylerin ve toplumun uğradıkları insani, fiziksel ve ekonomik kayıpları azaltmak veya önlemek ve ülke genelinde kişisel ıstırapı azaltmak ve iyileşmeyi hızlandırmaktır. [Cuny, 1986:25]. Afet yönetimi, iki afet arasında yapılan kriz ve risk yönetim çabalarının tümüdür. Ayrıca afetleri önlemek ve zararlarını azaltabilmek için, afete sebep olacak olaylara afet olmadan etkili bir şekilde ve hızlıca önlem alınması ile afet riski taşıyan toplumun güvenilir ve yaşanabilir bir çevreye kavuşabilmesi adına yapılması gereken bir mücadele sürecidir. Bu süreç toplumun tüm kuruluş ve kurumlarının belirlenmiş stratejiler ve öncelikli hedefleri ile beraber imkân ve kaynaklarını afetleri önlemek ve zararlarını minimize etmek için afet öncesi, afet sırası ve afet sonrası alınması ve yapılması gereken önlem ve çalışmaların yönlendirilme, destekleme, planlama ve koordine etme faaliyetleri ile kullanma ve etkin uygulayabilme sürecidir [Ergünay ve diğerleri, 2008:328].

3.2. Risk Yönetimi

Afet riski; tehlike, savunmasızlık ve maruziyetin birlikte meydana gelmesidir ve afet öncesi dönemle daha çok ilgilidir. Bu sebeple afeti önlemek, etkisini azaltmak veya doğabilecek zararları küçültmek için toplumun savunmasızlık ve maruziyetini azaltmamız gereklidir [Kadıoğlu, 2011:29]. Toplum ve çevreyi etkisi altına alabilecek olayların tüm olumsuz sonuçları risk kavramıyla ilgilidir. Bu kavramdan bahsedebilmek için belli bir toplumun ve yerin büyük ve tehlikeli bir olay yaşamaması ile mevcut durumun bundan zarar görerek etkilenmesi ya da etkilenme oranının şiddetinin öngörülebilir olması gerekmektedir. Olabilecek afetlerin belirlenerek, gerçekleşme ihtimallerinin analizi, bu ihtimalin gerçekleşmesi halinde toplumun ne şekilde etkileneceğinin tespiti ve sonucunda riski azaltacak çalışma, plan ve programların yapılmasına risk yönetimi denir. Belirlenen risklerin afet boyutuna dönüşmeden yok edilmesi ya da azaltılması iyi bir risk yönetimi ile mümkün olabilecektir. Bu bağlamda iyi bir risk yönetimi ile tehlikeler ve oluşturacağı riskler belirlenerek afet senaryoları hazırlanır, harita ve grafiklerden yararlanarak afetten korunma ve afete müdahaleyi verimli kılma adına mevcut kaynakların belirlenip uygun öncelikler ve kararların uygulamaya geçilmesi sağlanmış olur [Özkul ve Kahraman, 2007:256].

3.3. Kriz Yönetimi

Afet dönemlerinde yaşanan evre kriz sürecidir. Krizler; telaş, kargaşa ve karışıklığa sebep olup müdahaleleri uzun sürelidir. Bu yüzden her ülke, olağandışı durumların yaşanmasından evvel bu

durumları belirleyip sınıflandırarak çözüm üretmeleri için kendilerine has krizleri tanımlayacak kriz yönetim sistem ve organları geliştirmelidir [Kadıoğlu, 2011:30]. Kriz yönetimi, olağanüstü durumlarda mağduriyeti ve olumsuzlukları önlemek ve etkisini en aza indirmek için yapılması planlanan ve düzgün bir şekilde uygulanmasına yardımcı olacak faaliyetlerdir. Bu faaliyetler, aşamalı şekilde sistemli olarak karar vermeyi ve verilecek kararları uygulayacak olan ekiplerin oluşturularak yeni kararları hızlı şekilde uygulanmasını içerir [Tüz, 2004:85].

3.4. Afet Yönetimi Aşamaları

Afet yönetimi, bir afetin öncesinde, sürecinde, ya da sonrasında meydana gelen olaylarla ilgilenir. Afet öncesi ve sonrasında yapılacaklar kadar afet sırasındaki çalışmalarda önemlidir [Erkal ve Değerliyurt,2009:151]. A.Şahin Özcan (2011) afet yönetimini bir döngü olarak açıklamaya çalışarak,

Günümüz anlayışıyla, daha çok afet olayları meydana gelmeden önce öncelikle afet risklerinin tespit edilmesi ve bu risk ile zararların azaltılması veya tamamen ortadan kaldırılması, afetin meydana gelmesi halinde ilk yardım, kurtarma ve müdahale faaliyetlerinin yürütülmesi ile afet sonrası iyileştirme çalışmalarının uygulanması, yönlendirilmesi ve koordine edilmesi için ilgili kurum ve kuruluşların kaynaklarının bu ortak amaç doğrultusunda planlanarak yönetilmesidir.

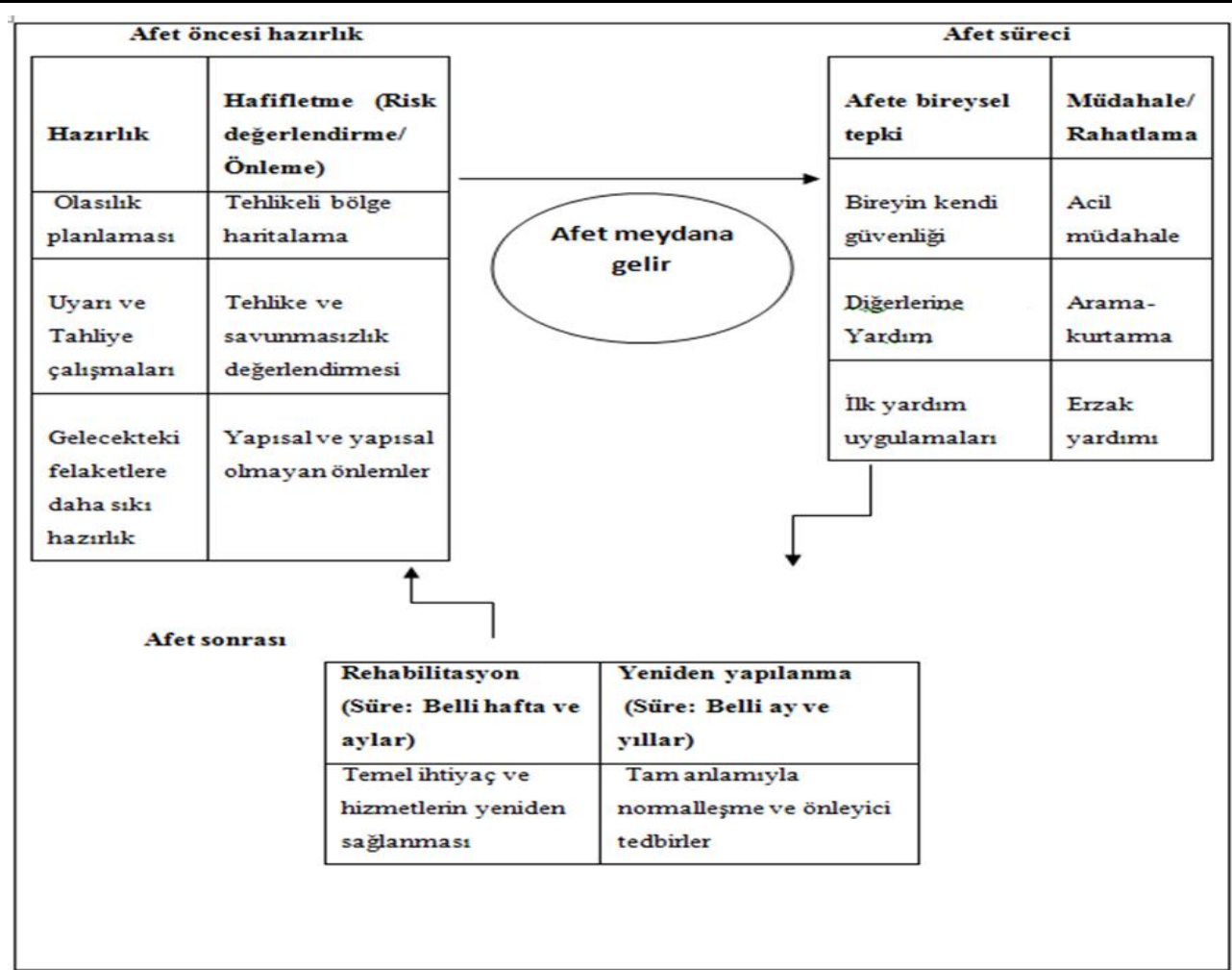
olarak açıklamıştır [Özcan, 2011:12]. Bu bağlamda afet yönetimi aşamaları aşağıda açıklanmaya çalışılmıştır.

□ Afet Öncesi (Hazırlık Süreci): Belli bir afet riski potansiyeli durumunda can ve mal kayıplarını azaltmak için yapılan faaliyetlerin tamamı afet öncesi hazırlık sürecine dâhildir. Örneğin, farkındalık kampanyaları, zayıf yapıları güçlendirme, hane ve toplum düzeyinde afet yönetimi planları gibi hazırlıklar afet öncesi hazırlık dönemini kapsar.

□ Afet Sırası (Afet Süreci): Kriz dönemi olarak da bilinen bu süreçte afetzedelerin ihtiyaç ve arzularının karşılanması ve çekilen ıstırapın en aza indirilmesi girişimlerinden oluşur.

□ Afet Sonrası (Normale Dönme Süreci): Afet öncesi normallik haline geri dönüş ve felaketten etkilenen topluluğun rehabilitasyonunu sağlamak amacıyla yapılan girişimler ve faaliyetler afet sonrası sürecini oluşturur. Bu faaliyetler müdahale ve iyileştirme (normale dönme) faaliyetleri olarak adlandırılır [Natural Hazards and Disaster Management, 2006].

Bu aşamalar bir döngü gibidir. Bir afet yaşanmasından sonra olabilecek diğer afete kadar bu süreç devamlı işler.



Şekil 1. Afet Döngüsü ve Aşamaları

Kaynak: Natural Hazards and Disaster Management: A Supplementary Textbook in Geography for Class XI: Central Board of Secondary Education <http://www.preventionweb.net/>

4. Kader

Kader konusu ise soyut bir kavram olup bu konuyla ilgili yüzlerce eser yazılmış, her dönemde ciddi tartışmalar yaşanmış ve günümüzde bile tartışılan bir konu özelliğini taşımaktadır. Kader ile alakalı bugüne kadar farklı görüşler öne sürülmüş ve açıklanmaya çalışılmıştır. Lügatta; takdir etme, şekillendirme, ölçme, biçime koyma gibi manalara gelen kader, Arapçada "kadera" fiili ile hisselere ayırma, herkese paylarını bölüştürme ve güç yetirme anlamlarına gelir [Armaner, 1967:47]. Kadere, hayır ve şerrin Allahü teâlâdan olduğuna inanmak imanın altıncı şartıdır. Amentü'deki, (Ve bil kaderi hayrihi ve şerrihi minallahi teâlâ) ifadesi, kaderin, hayır ve şerhlerin hepsinin Allahü teâlâdan olduğuna iman etmeyi bildirmektedir. İnsanlara gelen hayır ve şer, fayda ve zarar, kazanç ve ziyanların hepsi, Allahü teâlânın takdir etmesi ile olur. Kader, lügatte, bir çokluğu ölçmek, hüküm ve emir demektir. Çokluk ve büyüklük manasına da gelir. Allahü teâlânın, bir şeyin varlığını ezelden dilemesine kader denilmiştir [www.dinimizislam.com]. Kader konusuyla ilgili olan bazı âyet-i kerime mealleri şöyledir:

"Yaptıkları küçük büyük her şey, satır satır kitaplarda yazılmıştır." [Kamer 52, 53].

"Her ümmetin bir eceli vardır, gelince ne bir an geri kalır, ne de bir an ileri gider." [Araf 34].

"Göklerde ve yerde zerre miktarı bir şey, Ondandır gizli kalmaz. Bundan daha küçük ve daha büyüğü de, apaçık kitaptadır." [Sebe 3].

"Bir canlıya verilen ömür ve ömrünün azaltılması da mutlaka bir kitaptadır." [Fatr 11].

Kaderin bir parçası olan kazanın kelime anlamı, yaratma, emir ve hükümdür [Manzur ve Cemalüddin, 1990]. Kavramsal manada ise; hükmetmek, sağlam yapmak, yerine getirmek ve

emretmek anlamaları bulunmaktadır [Yavuz, 2001:58]. Kaza, Allahu tealanın ezeli ilmiyle yazmış olduğu kaderi belli bir vaktin ve şartın gerçekleşmesi ile yaratmasıdır [Yılmaz, 2011:12]. Buna göre kaza demek, ezelden ebede kadar yaratılacak şeyleri, Allahü teâlânın ezelde dilemesidir [www.dinimizislam.com].

Kaderle alakalı bir başka önemli kavram ise tevekküldür. Tevekkül, sözlükte herhangi bir işi elinden geleni yaptıktan sonra işi Allahu tealaya bırakmak, işi başkasına ısmarlamak anlamına gelmektedir [http://www.tdk.gov.tr]. Buradan tevekkülün çalışma ve gayreti bırakmak anlamı çıkarılmaması gereklidir. Asıl ifade edilmesi gereken nokta şudur ki, işin yerine getirilmesinin Allahu tealaya bırakılması değil, emir ve kararın Allahu teala tarafından alınması için Allahu tealaya havale edilmesi mevzudur [Yazır, 7/435].

Kader ile ilgili 3 görüş mevcuttur. Bunlardan ilki olan Kaderiyye görüşüne göre insan fiillerinde hür olduğu için kaderi kişilerin iradelerinin belirlediği, iyilikleri Allahu tealanın verdiğini şer ve kötü işlerin ise kullardan kaynaklandığını benimseyerek Allahu tealanın önceden her şeyi bilip takdir etmesini de inkar etmiş olmaktadır [Cabiri, 2001: 383-386]. İkinci olarak Cebriyye görüşüne göre Allahu teala, insanın yapacağı bütün eylemleri ilmi ezelisinde takdir edip bildiği için, çalının akan dereye sürüklenmesi gibi insanı da kader, çemberinde sürüklemektedir (Tunç, 1987:6). Bu düşünce, insanların hiçbir davranışından sorumlu tutulamayarak kaderi suçlayabileceği için ayet ve hadislerle çelişmesinden dolayı önemini yitirmiştir (Keskin, 1997: 199). Son olarak Ehl-i Sünnet'in kader inancına göre bütün canlıların fiillerini yalnızca Allahu teala yaratmıştır [Sabunî, 1978:134]. Fakat insanların bir iradesi olduğunu ve kendi fiillerini oluşturacaklarını [Matürîdî, 2003:225], davranış ve eylemlerinden dolayı da mükâfatlandırılacak ya da cezalandırılacaklarını savunmuşlardır [Aydın, 1979:331-333]. Ehl-i sünnet, kadere iman etmiş, kadere inanmak iman şartı olduğunu ve kadere inanmayanların mümin olamayacağını belirtmişlerdir. Kaderin, iyisi, kötüsü, tatlısı, acısı, hep Allahü teâlâdandır [www.dinimizislam.com].

Musibetlerin insanların kendi yaptıkları şeylerin sonucu olduğunu Allahu teala ayetleri ile bildirmiş [Kasas 28/47, Nisa 4/62, Al-i İmran 3/165] ve müfessirler bunu afeti yaratma fiilinin Allahu tealaya ait olduğunu ve insanın iradesi sonucu ortaya çıkan davranışlarından dolayı da insana ait olduğunu açıklamışlardır [Çağırıcı, 2006:255-256]. Fakat maruz kaldığı afet ve sonuçlarını kader kabul eden kişiler kendi sorumluluğunu ve tedbirsizliğini görmezlikten gelip kadere sığınarak işin basitine gitmektedirler. Aklını kullanmayan kimseler için gerçekten de sığınma olanağı tanyan kader, kişilerin kendilerini aldanacak tutumlara sevk etmesine vesile olmaktadır [Akbulut, 1994:131].

Elmalı Hamdi Yazır, Yusuf Suresini tefsir ederken tedbir ile takdir arasındaki bağlantıyı izah etmeye çalışır. Yazır'a göre tedbirli olmak insanın görevlerindedir. Ancak Allahu teala bir kaza yazmış ve olmasını dilemişse kesinlikle gerçekleşir. Bu yüzden hiçbir tedbir Allahu tealanın takdirinin önüne geçemez ve engelleyemez. Burada tedbir yardım dilemedir. Bu yüzden alınacak tedbir takdire uygunsuzsa fayda verir değilse takdire engel olamaz [Yazır, 5/70]. Ayrıca afetler; gerek insanların kusurlarıyla olsun gerek kusurları olmadan Allahu tealanın takdiri ile olsun Allahu tealanın dilemesi ile gerçekleşmektedir. "Yeryüzünde vuku bulan ve sizin başınıza gelen herhangi bir musibet yoktur ki biz onu yaratmadan önce, bir kitapta yazılmış olmasın. Şüphesiz bu Allah'a göre kolaydır" ayeti insanın yaşanan afetlere karşı Allahu tealanın takdiri ile gerçekleştiğine inanmak gerektiğini açıklamaktadır [Hadid 57/22]. Ayrıca olaylar Allahu tealanın insanları yaptıklarından sorumlu tutmasıyla beraber takdir edilmiş kesin bir hükmün olmasıyla yaşanacaktır [Yazır, 6/403].

5. Amaç, Kapsam ve Yöntem

5.1. Araştırmanın Amacı

Bu araştırma, Gümüşhane'de yaşayan bireylerin afet konusunda bilgi ve bilinç düzeyleri ile kader inançları arasındaki ilişki düzeyleri ve afete ne kadar hazır oldukları üzerinedir. Çalışmamızda amacımız insanların afet bilgileri ölçülerek kadersel inançları irdelenmiş ve afetler ile kadercilik anlayışındaki ilişki araştırılmıştır.

5.2. Araştırmanın Kapsamı

Araştırmamız zaman ve maliyet kısıtlarından dolayı rassal olmayan örnekleme yöntemlerinden keyfi örnekleme yöntemi ile Gümüşhane il merkezinde ikamet eden 385 kişi ile yüz yüze anket yöntemi kullanılmıştır.

5.3. Araştırma Yöntemi

Araştırmamızın anketinin hazırlanmasında Üzeyir Ok'un 2011 yılı ve Saffet Kartopu'nun 2013 yılındaki çalışmalarından yararlanılmıştır. Demografik bilgiler 6 soruda, Afet Bilinci 30 soruda ve Kadersel Tutum tek soru ile ölçülmüştür. Araştırmamızda betimleyici istatistikler ve ki-kare testi kullanılmıştır. Afet bilinci sorularında kullanılan seçenekler ikili (Evet-Hayır) derecelendirmeye göre düzenlenmiştir. Demografik bulgular ve afet bilinci tablo ve grafiklerle değerlendirilmiştir. Kader inancı ve afet bilinci ilişkisi ise Kikare vasıtasıyla belirlenmiştir. Verilerin analizinde SPSS 20 paket programı kullanılmıştır.

6. Bulgular

Çalışmada, "Afet Bilinci ile kader inancı arasında ilişki vardır" hipotezi test edilerek aşağıda belirtilen verilere ulaşılmıştır.

6.1. Demografik Bulgular

Tablo 2. Demografik Bulgular

Özellik	Dağılım	Frekans	Yüzde
Cinsiyet	Kadın	117	30,4
	Erkek	268	69,6
Medeni Durum	Evli	184	47,8
	Bekâr	172	44,7
	Dul	20	5,2
	Boşanmış	9	2,3
Yaş	18-25	109	28,3
	26-34	110	28,6
	35-45	101	26,2
	46-55	49	12,7
	56 ve üzeri	16	4,2
Eğitim	İlköğretim	52	13,5
	Lise	108	28,1
	Ön lisans	64	16,6
	Lisans	108	28,1
	Yüksek Lisans	31	8,1
	Doktora	22	5,7
Gelir	0-1500 TL	160	41,6
	1501-2500 TL	98	25,5
	2501-3500 TL	60	15,6
	3501-4500 TL	47	12,2
	4501 TL ve üst	20	5,2
Meslek	Memur	107	27,8
	İşçi	69	17,9
	Serbest Meslek	34	8,8
	Ev Hanımı	33	8,6
	Çiftçi	14	3,6
	Öğrenci	80	20,8
	İşsiz	7	1,8
	Tüccar	11	2,9
Diğer	30	7,8	

Ankete katılan 385 kişiden 117'si kadın (%30,4), 268'si erkektir (%69,6). Medeni durumu göz önüne alındığında 184 kişinin evli (%47,8), 172 kişinin bekâr (%44,7), 20 kişinin dul (%5,2) ve 9 kişinin de boşanmış (%2,3) olduğu görülmüştür. Yaş grupları dikkate alındığında 109 kişi 18-25 yaş

aralığında (%28,3), 110 kişi 26-34 yaş aralığında (%28,6), 101 kişi 35-45 yaş aralığında (%26,2), 49 kişi 46-55 yaş aralığında (%12,7) ve 16 kişinin de 56 yaş ve üzerindedir (%4,2). Anket yapılan 385 kişiden 52'si ilköğretim (%13,5), 108'i lise (%28,1), 64'ü ön lisans (%16,6), 108'i lisans (%28,1), 31'i yüksek lisans (%8,1) ve 22'si doktora eğitimi almıştır. Gelir durumları incelendiğinde geliri 0-1500 TL arasında olan 160 kişinin (%41,6), 1501-2500 TL arasında olan 98 kişinin (%25,5), 2501-3500 TL arasında olan 60 kişinin (%15,6), 3501-4500 TL arasında olan 47 kişinin (%12,2), 4501 TL ve üzerinde olan ise 20 kişinin (%5,2) olduğu görülmüştür. Meslek durumlarında ise 107 kişi (%27,8) memur, 69 kişi (%17,9) işçi, 34 kişi (%8,8) serbest meslek, 33 kişi (%8,6) ev hanımı, 14 kişi (%3,6) çiftçi, 80 kişi (%20,8) öğrenci, 7 kişi (%1,8) işsiz, 11 kişi (%2,9) tüccar ve 30 kişide (%7,8) diğer meslek gruplarındadır.

6.2. Kader İnancı ile İlgili Betimsel Analizler

Kader inancı ile ilgili soruya ankete katılan 385 kişinin görüşleri incelendiğinde 69 kişi (%17,9) kaderi insanların tamamen kendi çizdiğini, 240 kişi (%62,3) kaderi hem kendi hem de Allahu teala tarafından belirlendiğini, 70 kişi (%18,2) ise kaderi sadece Allahu tealanın çizdiğini belirtmiştir. 6 kişi (%1,6) ise kader ile ilgili görüşlerini bildirmemiştir.

Tablo 3. Kader İnancı ile İlgili Betimsel Analizler

	FREKANS	YÜZDE
Kaderi insan sadece kendi belirler	69	17,9
Kaderi hem kendi hem Allah belirler	240	62,3
Kaderi sadece Allah belirler	70	18,2
Cevap Yok	6	1,6
TOPLAM	385	100,0

6.3. Afet Bilinci ile İlgili Betimsel Analizler

Afet Bilinci 30 soruda ve ikili (Evet-Hayır) derecelendirmeye göre düzenlenmiştir.

Tablo 4. Genel Tablo

		EVET	HAYIR
1	Türkiye'nin bazı bölgelerinin depremde yüksek risk düzeyinde olmasına rağmen genel anlamda ülkemiz deprem bölgesi değildir.	42,3	57,4
2	Deprem anında hemen evden dışarıya çıkmaya çalışırım.	56,9	42,6
3	Deprem anında pencereye ve balkona yakın dururum ki erkenden çıkabileyim.	31,4	68,3
4	Deprem sonrasında binalar hasarlı bile olsa içine girer insanları kurtarmaya çalışırım.	46,2	53,5
5	Deprem anında büyük ve sağlam bir eşyanın altına girmem çünkü beni ezebilir.	52,7	46,8
6	Enkaz altında kalırsam bütün gücümle ve devamlı şekilde bağırırım ki beni duyup yardım etsinler.	75,1	24,7
7	Oturduğum eve depreme dayanıklılık testini yaptırдым.	41,8	57,4
8	Deprem anında uygulayacak bir planım var.	34,8	63,6
9	Oturduğum binanın inşaat standartlarına uygun yapıp yapılmadığını biliyorum.	47,3	52,2
10	Evimde yüksek ve ağır mobilyaları ve beyaz eşyayı duvara sabitledim.	35,5	65,7
11	Evimde tehlike oluşturabilecek durumlar hakkında daha önce bir uygulamada bulundum.	25,5	74,5
12	Yangın durumunda ne yapacağımı çok iyi biliyorum.	56,4	43,1
13	Yangın söndürücüyü kullanmayı biliyorum.	62,3	37,4
14	Evimde yangın söndürücü var.	24,4	75,3
15	Yangın halinde tavana yakın dururum ki oksijen miktarı yukarı bölgelerde daha fazladır.	43,9	55,6
16	Elektrik aksamında bir yangın varsa üzerine su dökmek az da olsa işe yarar.	17,7	82,1
17	Elbiselerim alev alırsa ilk önce onları çıkarmaya çalışırım.	60,3	38,4
18	Acil durum telefon numaralarının çok büyük bir kısmını ezberliyorum.	76,6	22,6
19	Evimde afet halinde ihtiyaç olur diye fazladan su ve konserve gıda bulundururum.	29,9	69,6
20	Evimde afet çantam vardır.	23,9	75,8
21	İlk yardım müdahalesi konusunda bilgiliyim.	50,9	48,6
22	Temel afet bilgisi eğitimi aldım.	29,6	69,4
23	Afet sinyali uyarı ses ve görsellerini biliyorum.	46,8	52,2
24	Fırtınalı ve yıldırımlı havada arabada durmaktansa dışarıda düz bir yerde bulunmayı tercih ederim.	47,0	52,2
25	Yangın ve gaz zehirlenmesine karşı soba ve gaz boru hatlarını sabitledim.	46,8	52,7

26	Evimdeki elektrik, gaz ve su vanalarının nasıl kapanacağını biliyorum.	84,2	15,1
27	Önemli evraklarımın birer kopyasını çıkarıp yakın bir akrabama veya güvenli başka bir bölgeye gönderdim.	24,4	74,3
28	Afetlere karşı sigorta seçeneğini kullanıyorum.	40,8	58,2
29	Hızla akan su köprülerinin üzerinde su seviyesi köprüye yakın olsa da geçerim.	26,5	72,7
30	Eğer yolda su miktarı az ise o yoldan arabayla geçerim.	64,9	34,3

6.4. Kader İnancı ile Afet Bilinci Arası İlişki Analizi

Kader inancı ile afet bilinci arasındaki ilişki analizi Ki kare analizi vasıtasıyla yapılmış olup bulgular aşağıda gösterilmiştir.

Tablo 5. Çapraz Tablo (s3)

Kader görüşü		Evet	Hayır
	Sadece kendi belirler	72.2	27.8
	Hem kendi hem kader belirler	24.3	75.7
	Sadece kader belirler	35.7	64.3

Pearson Ki Kare: 20.044; sd:2; p:0.000

Tablo 6. Çapraz Tablo (s12)

Kader görüşü		Evet	Hayır
	Sadece kendi belirler	39.1	60.9
	Hem kendi hem kader belirler	60.3	39.7
	Sadece kader belirler	60.9	39.1

Pearson Ki Kare: 10.374; sd:2; p:0.006

Tablo 7. Çapraz Tablo (s13)

Kader görüşü		Evet	Hayır
	Sadece kendi belirler	37.8	62.2
	Hem kendi hem kader belirler	65.0	35.0
	Sadece kader belirler	68.1	31.9

Pearson Ki Kare: 7.901; sd:2; p:0.019

Yapılan Ki kare analizleri sonucunda Afet bilinci ile ilgili toplam 30 maddenin sadece bu 3 maddesinde kader inancı farkına göre bir değişiklik bulunmuş olup, diğer sorulara verilen cevaplar kader inancı türlerine göre anlamlı bir farklılık göstermemiştir. Bu üç soruya verilen cevaplar arasında istatistiksel olarak anlamlı bir fark olmasına rağmen genel anlamda diğer sorular göz önüne alındığında afet bilincinin kader inancı türlerine göre bir değişiklik göstermediği sonucuna varılmıştır, yani hipotezimiz reddedilmiştir.

Sonuç ve Değerlendirme

Yapılan bu çalışma Gümüşhane özelinde incelenmiş olup bireylerin afetlere karşı bakış açıları ile inanç ve tutumları irdelenmeye çalışılmıştır. Bu bağlamda ankete katılan 385 kişiden 6 kişi kader inancı ile ilgili görüş vermekten kaçınmış geri kalan 379 kişi ise görüşünü bildirmiştir. Çıkan sonuçlara göre ise %62,3'ü kader inancını hem insan iradesi hem de Allahu tealanın iradesinin birlikte olduğunu belirtmişlerdir. O halde insanların kendi iradelerinden de sorumlu olduğunu ve sadece kendi dışı bir iradenin hâkim olmadığı bilincindedirler.

Türkiye'de çoğu bölgenin deprem riski yüksek olmasına rağmen ankete katılanların yarıya yakını (%42,3) maalesef bu bilincin farkında değildir. Zira Gümüşhane merkez ve ilçelerinde şuana kadar yüksek dereceli bir deprem olmaması bu inancın oluşmasında etken olduğunu düşündürmektedir. Fakat şuana kadar depremin yıkıcı etkilerinin görülmediği bu bölgede şiddetli depremin olmayacağı ya da I. derece deprem riski taşıyan civar illerde yaşanabilecek yıkıcı bir depremin kenti etkileyerek mağdur etmeyeceği düşüncesine sahip olunmamalıdır.

Gümüşhane ilinde yaşanan ve hissedilen depremlerde can ve mal kaybı yaşanmaması bölge insanlarında depreme karşı bilinç düzeyini olumsuz etkilediği düşünülmektedir. Şöyle ki deprem anında bireyin kendini dışarı çıkarmaya çalışma oranı % 56,9 iken pencere ve balkona yakın durma tercihi % 31,4'tür. Ayrıca deprem sırasında kişilerin kendilerini korumak için büyük bir eşyanın altına sığınma tercihi ise %46, 8'dir.

Göçük altında devamlı ve yüksek sesle bağırarak insanın vücut enerjisini azaltır ve dayanıklılığını zayıflatır. Bunun yerine belli aralıklarla vücudumuzda ki enerjiyi de israf etmeyecek düzeyde yardım istemek daha faydalı olacaktır. Ama ne yazık ki bununla ilgili soruya kişilerin %75,1'i devamlı ve yüksek sesle bütün gücümle bağırırım seçeneğini işaretlemişlerdir. Bu da demek oluyor ki kişilerin, arama-kurtarma ekiplerinin enkaza ulaşınca dek geçen sürede tüm güçlerini kaybedecekleri ve kurtarma ekibine seslerini duyuramama durumunun oluşabileceğini gösteriyor.

Depremde can kaybı büyük çoğunlukla ikamet edilen binanın çökmesiyle altta kalma sonucu ezilme ya da göçük altında oksijensiz kalma sonucu oluşmaktadır. Bu bağlamda oturlan binanın sağlamlığı ve zemin yapısı önem kazanmaktadır. Oturduğumuz binanın standartlara uygunluğu ile zemin yapısının durumunun nasıl olduğu gibi testlerin yapılıp yapılmadığını bilmek ikamet tercihimizi şekillendirebilir. Çünkü zemin yapısı zayıf olan alanda çok sağlam bina yapılsa bile bina çökebilir. Ayrıca zeminin eğimli olduğu yerlerde depremin ikincil etki olarak heyelanı beraberinde getirerek binanın zemin üzerinde hareketine neden olarak yıkılmasına yol açma durumu vardır. Özellikle Gümüşhane il merkezinde de eğimli arazilerde inşa edilen yapılar bu risk grubundadır. Yapılan ankette çıkan sonuçlarda ise ne yazık ki bu bilincin olmadığı görülmüştür. Oturduğu eve dayanıklılık testi yaptırmayanlar % 57,4'ü oluştururken ikamet edilen binanın standartlara uygun şekilde yapıldığını bilen % 47,3'tür. O halde ankete katılanların yarıya yakını oturduğu evin durumundan bihaberdir. Öte yandan deprem anında bir planı olan sadece %34,8 ve yıkılabilecek yüksek ve ağır eşyalarını ise duvara sabitleyen %35,5'tir. Bu çıkan sonuçlar kişilerin bilinç düzeylerinin düşük olduğunun ve tedbirsizliğinin bir göstergesidir.

Hayatta her an bir tehlike ile karşı karşıya kalınabilir. Ancak bizim alacağımız tedbir tehlikelerden korunmamıza ve hayatta kalmamıza yardımcı olacaktır. İnsanlar tatbikat yaparak maruz kalılabilecek afetlere karşı hazırlıklı olarak bilinçlendirilmelidirler. Japonya'da düzenli olarak deprem tatbikatları yapılmaktadır ve bu tatbikatlar ile halkta bilinç düzeyi devamlı sıcak tutularak doğru tercihler yapması sağlanmaktadır. Aynı zamanda zeminlerine uygun kendi standartlarını karşılayan binalar yaparak yaşanan sekiz şiddetinde bir depremden bile Japonlar çok az hasarla kurtulabilmektedirler. Fakat ülkemizde yaşanan daha düşük şiddetli bir depremde tedbirsiz yaşadığımız ve gereken bilince sahip olmadığımız için yüzlerce ve binlerce insanımız hayatını kaybetmektedir. Gelişen teknolojiyi doğru kullanırsak ve gerekli çalışmalarını yaparsak Japonya ya da ABD gibi gelişmiş ülkelerde olduğu gibi daha az kayıplar verebiliriz.

İnsanların çoğunun hayatları kapalı alanlarda geçmektedir. Bu yüzden bulunduğumuz binanın durumu önem kazanmaktadır. Evimizde tehlike oluşturabilecek durumlara hazırlıklı olmak için bazı uygulamalarda bulunmak hayatta kalma ihtimalimizi arttırabilir. Fakat ankete katılan 385 kişiden 287'si (% 74,5) bu çeşit bir uygulamalarının olmadığı yönünde görüş bildirerek ne kadar rahat yaşadığımızı göstermişlerdir.

Yangın önlenemez ya da etkileri azaltılabilir bir olaydır. Bu yüzden yangın durumunda ne yapılacağını iyi bilmek gereklidir. Yangına sebebiyet verecek unsurlardan ya da yangını daha da arttıracak uygulamalardan kaçınırsak yaşanacak kayıpları azaltabilir hatta önleyebiliriz. Ankete katılanların %43,1'i yangın durumunda ne yapılacağını bilmemektedir. Bildiklerini iddia edenlerin oranı ise %56,4'tür. Ancak elbiseleri alev alanların ilk önce elbisesini çıkarma gayreti ise % 60,3'tür. Elbiselerin alev alması durumunda ilk önce onları çıkarma gayreti yanlış bir uygulamadır. Çünkü yanan elbiselerin çıkarılırken vücudumuzun diğer bölgeleri özellikle baş bölgesinde bulunan organlarımızın yanma riski vardır. Öncelikle battaniye, palto gibi vücudu örtecek, alevin hava ile temasını kesecek materyaller ile insan vücudun sarılması ya da yakında varsa toprak, su, yangın söndürücü gibi unsurları kullanmalıdır. Yangın söndürücünün nasıl kullanılacağını bilenler ise %62,3'tür ve evlerinde yangın söndürücü olanların oranı da sadece %24,4'tür. Elektrik aksamında yangın çıkması halinde üzerine suyun dökülmeyeceğinin farkında olanlar ise % 82,1'dir ve bu olayda bilinç düzeylerinin yüksek olduğu saptanmıştır. Ancak bu bilinç düzeyi, yangın esnasında tavana yakın durma sorusunda gösteremeyerek hayır cevabı veren kişi oranı %55,6'da kalmıştır. Yangın sonucu oluşan duman yukarı doğru yükselerek oksijen miktarını azalttığı için üst katlarda bulunmak zehirlenme olayını arttırmaktadır. Bu yüzden yukarı taraflarda bulunma durumundan sakınılması gereklidir.

Hayatta tedbirli olmalıyız. Bir olay başa gelmedi diye asla başa gelmeyecek diye bir kaide yoktur. Birey olarak afet ile ilgili bilgi birikimimizi edinmek ve eğitimimizi almak daha doğru bir davranıştır. Afete maruz kaldığımızda belli bir süre yaşamımızı sürdürecektik kadar evimizde fazladan yiyecek ve içecek bulundurmamak afet bilinci içerisinde bir davranış olur. Gerekli sağlık malzemeleri bulundurmamak ve ilk yardım konusunda bilgili olmak afet durumunda yaşam süremizi arttıracak diğer unsurlardır. Ayrıca afet uyarı ses ve görselleri de insanların tedbir almasına olanak sağlayan uyarıcılardır. Bunların bilinmesi ve nasıl davranışta bulunması gerektiği öğrenilmelidir. Çünkü afetin kendisi değil sonucu kayıp yaşatmaktadır. Sonucundan ne kadar etkileneceğimize bizim önlem, bilgi ve çalışmalarımız belirleyici olacaktır. Ankete katılanların %69,6'sının afet halinde ihtiyaç olur diye fazladan gıda malzemesi stoklamadığı, %75,8'inin sağlık ve yardım çantasını bulundurmadığı tespit edilmiştir. Ayrıca % 48,6'sının ilk yardım konusunda bilgisi olmadığı, %69,4'ünün temel afet eğitimi almadığı, %52,2'sinin afet sinyal ses ve görsellerini bilmediği ve %22,6'sının ise acil durum telefon numaralarını bilmediği saptanarak ne kadar tedbirsiz ve afet bilincinden uzak olduğumuz gözler önüne serilmiştir.

Sel olayı can ve mal kaybına sebebiyet veren bir afettir. Nehir sularının miktarlarının artarak taşkınlara sebebiyet vermesi seli daha da tehlikeli hale getirir. Bu yüzden nehirlerin ıslahı ve suyun taşmasını önleyecek yapıların yapılması gerekmektedir. Nehir üzerlerine kurulmuş köprülerde su seviyesi köprüye yakın seviyelere çıkabilir. Bu yüzden köprünün suyun kuvvetinden dolayı direnci kırılıp yıkılma tehlikesi olabilir. Nitekim Mart ayında Samsun'un Çarşamba ilçesinde köprüyü yıkan sel sularından dolayı köprüden geçiş esnasında nehre düşen araçtaki kişiler çevredeki vatandaşlar tarafından kurtarılmıştı. Yapılan ankete katılanların %72,7'si su seviyesi köprüye yakın olsa bile geçmem demiştir. Ancak yolda su miktarı az olsa geçirim diyenler %64,9'dur. Su seviyesi az olan fakat asfaltı gözükmeyen yoldan geçmek tehlikeli olabilir. Yolda olan bir çukuru ya da tehlikeyi göremeyebiliriz.

Yıldırımli havada düşecek şimşeklerden korunmak için ağaç altında durmak yanlış bir önlemdir. Çünkü ağaçlar yıldırımı çeker. Aynı şekilde yüksek alanlarda bulunmakta yıldırma maruz kalma riski oluşturabilir. Araç ile seyahat halinde araç için durmak daha güvenli bir önlemdir. Çünkü aracın tekerlekleri lastik olduğu için toprakla elektriklenme temasını kesmektedir. Ankette, fırtınalı ve yıldırımli havada arabada durmaktansa dışarda düz bir yerde bulunmayı tercih ederim diyenler %47'dir.

Ülkemizde yaşanan afetlerde can kaybı yanında yüksek miktarda maddi kayıpta yaşanmaktadır. Bu da hem birey olarak hem de devlet olarak ekonomik kayıpların yaşanmasına sebep olmaktadır. Ancak bireylerin ekonomik gücü daha sınırlı olduğu göz önüne alındığında bina, araç, eşya, sağlık gibi sigorta seçeneklerinin kullanılması bireylerin ekonomilerine önlem olarak sunulacak bir çözümdür. Yıkılan bina, kaza yapan araç, telef olan hayvan gibi yitkilerde devlet desteği ile telafisinin mümkün olduğu sigortayı kullanmak mal kaybının yaşanmasına bir önlem olarak düşünülmelidir. Ankete katılanlardan, afetlere karşı sigorta seçeneğini kullandığını belirten ise sadece %40,8 olduğu görülmüştür.

Ülkemiz afet potansiyeli yüksek bir bölgededir. Doğal ve doğal olmayan afetlerin hemen hemen çoğuna bulunduğu jeopolitik konum ve yer yapısı dolayısıyla ile maruz kalmaktadır. Böylesi yüksek riskin olduğu bölgelerde yaşayan toplumun bu risklerle birey olarak tek başlarına başa çıkılmalarını beklemek iyimserlik olur. Toplumsal bir bilinç ve devlet eliyle yapılacak eğitim ve önlem faaliyetleri ile riskleri ve maruziyeti azaltmak, afet etkilerini minimize etmek ve üstesinden gelmek için afet bilincinin devlet ve birey entegrasyonu ile aşılması umulmaktadır. Burada birey olarak bizlere afet bilincine sahip olmak, her an bir afetle karşılaşabileceğimizin farkında olmak ve buna göre tedbir ve önlem almak düşmektedir.

Afet öncesi alacağımız önlemler ile afet anında yapacaklarımızı bilmek, afet sonrası insan yaşamını ve toplumun geleceğini belirleyen eylemlerdendir. Sağlıklı nesiller ve devamlı gelişen bir toplum olabilmemiz adına afet bilgi ve bilinç düzeyimizi üst seviyelere taşıma gayreti içinde olup her yaşanan felaketlerin sonucunu kadere yüklememek gereklidir. Yapılan çalışmamızda bu konu hakkında Gümüşhane ili için verimli bir sonuç aldığımız söylenemeyebilir. Gelişen teknolojiye rağmen eski usul kentleşmenin doğuracağı sıkıntılardan en az zararla atlatılması bireylerin geleceği

için alınacak tedbir ve düzenlemelerle mümkün olabilecektir. Çalışmamızdan elde ettiğimiz bulgular üzerine kentte ikamet eden bireylerin olası bir afete hazır olmadıkları söylenebilir. Çıkan sonuçlarda sevindiren taraf ise kader inancı ile afet bilinci arasında bir ilişki olmadığıdır. Çünkü kişilerin kader görüşü ne olursa olsun gerekli eğitim ve faaliyetlerle afet bilinç seviyeleri arttırabilir.

Öğrenmenin yaşı olmadığı gibi başa gelecek felaketlerin de belli bir zamanı yoktur. Afet bilincine, toplumun sadece tavanı değil tabanı da sahip olmalıdır. Yani halkın geneli bilinçlendirmelidir. Bu bağlamda afet ile ilgili kavramlar ilköğretimde öğretilmeli, ortaöğretimde zorunlu ders olmalı ve yükseköğretimlerde ise bununla ilgili bölümler üniversiteler arası yaygınlaştırılmalıdır. Bu alanda uzmanlaşma için lisansüstü programları arttırılarak kariyer meslekler oluşturulmalıdır. Belli bölgelerde afet uygulama fuarları kurularak halkın ziyaretine açılmalı ve afetin tehlikesinin farkındalığı arttırılmalıdır. Öte yandan bu fuarda önlemlerle gösterilerek bireylerin bilinç düzeyleri arttırılmalıdır. Yasal düzenlemelerle yaptırımların ve cezaların caydırıcılığı arttırılarak bilinçsiz yapı yapanların ve afetin sonuçlarının ağırlaşmasına sebebiyet verenlerin önüne geçilmesi gereklidir. Gelişen ve yenilenen teknolojiyi takip ederek yapılarımızı modern ve uygun yapılmasına olanak tanınmalıdır. Tabiata zarar vermeden şehir içinden geçen nehirlerin ıslahı yapılmalı ve şehir altyapı sistemlerinin güvenliğini sağlayacak şekilde oluşturulması sağlanmalıdır. Belediyeler ile merkezi yürütme organları oy rantı için göstermelik altyapı çalışması yerine insanlara değer vererek hizmet üretmelidir. Gelecek nesillerin atası olarak torunlarımıza güvenli ve yaşanabilir bir çevre bırakmak devlet ve millet olarak herkesin boynunun borcudur.

Kaynakça

- Abdallah, S. ve Burnham, G. (2000). Public health guide for emergencies. The Johns Hopkins School of Hygiene and Public Health and The International Federation of Red Cross and Red Crescent Societies, Boston.
- Akbulut, A. (1994). Allah'ın takdiri-kulun tedbiri. *A.Ü.İ.F. Dergisi*, 33, 129-156.
- Armaner, N. (1967). İnanç ve hareket bütünlüğü bakımından din terbiyesi. Milli Eğitim Bakanlığı.
- Aydın, A. A. (1979). İslam inançları ve felsefesi (Tevhid ve İlm-i Kelam). 5. Baskı, İstanbul: Çağrı Yayınları, 331-333.
- Bayrak, T. ve diğerleri (2010). Gümüşhane heyelanları. *Harita Teknolojileri Elektronik Dergisi*, 2(1), www.teknolojikarastirmalar.com (14.02.2015)
- Cabiri, M.A. (2001). Arap-İslam siyasal aklı (trc. Vecdi Akyüz). İstanbul: Kitabevi Yayınları, 383-386.
- Cuny, F. C. (1986). Aim and scope of disaster management. Wisconsin University, Disaster Management Center.
- Çağırıcı, M. (2006). "Musibet" Türkiye Diyanet Vakfı İslam Ansiklopedisi içinde. İstanbul: Türkiye Diyanet Vakfı, 31, 255-256.
- Demir, A. ve Aktaş, E. (2008). Gümüşhane sancağında doğal afetler (1888-1910). <http://dergiler.ankara.edu.tr/dergiler/19/1348/15616.pdf>, (21.05.2015).
- Dombrowsky, Wolf R. (1998). Again and again: Is a disaster what we call a disaster?. What is a disaster (ed.) E. L. Quarantelli, Routledge, New York, 19-28.
- Ergünay, O. (1998). Acil yardım planlaması ve afet yönetimi. AİGM, Ankara, 37.
- Ergünay, O. ve diğerleri (2008). Afet yönetimi ile ilgili terimler açıklamalı sözlük. Afet zararlarını azaltmanın temel ilkeleri. (Ed.: Mikdat Kadıoğlu, Emin Özdamar), JICA Türkiye Ofisi, Yayın No:2, 328.
- Erkal, T. ve Değerliyurt, M. (2009). Türkiye'de afet yönetimi, *Doğu Coğrafya Dergisi*, 22, 151.
- Genç, F. N (2007). Türkiye'de doğal afetler ve doğal afetlerde risk yönetimi. *Stratejik Araştırmalar Dergisi*, 5(9), 204-205.
- Gümüşhane İl Afet ve Acil Durum Müdürlüğü (2015). Gümüşhane sel yönü. Afet Raporu.
- Gümüşhane İl Afet ve Acil Durum Müdürlüğü resmi internet sitesi. İlimizin afetselliği. <http://gumushane.afad.gov.tr/sayfa.asp?sayfaID=4>, (24.06.2015)
- Gümüşhane Üniversitesi Mühendislik Fakültesi Jeofizik Mühendisliği Bölümü. <http://jeofizik.gumushane.edu.tr/GDR-95.html>, (22.04.2015).

- Hopkins Johns Bloomberg School of Public Health, Disaster Definitions, http://www.jhsph.edu/research/centers-and-institutes/center-for-refugee-and-disasterresponse/publications_tools/publications/_CRDR_ICRC_Public_Health_Guide_Book/Chapter_1_Disaster_Definitions.pdf, (15.06.2015).
- Kadioğlu, Miktad (2011). Afet yönetimi: Beklenilmeyeni beklemek, en kötüsünü yönetmek. 1. Baskı, İstanbul: T.C. Marmara Belediyeler Birliği Yayını, 1-220.
- Keskin, H. (1997). İslam Düşüncesinde Kader ve Kaza. İstanbul: Beyan Yayınları, 199.
- Kutluay, H. (2014), "Doğal Afetler Nelerdir?", <http://www.makaleler.com/do%C4%9Fal-afetler-nelerdir> (13.06.2015).
- Louhisuo, M., Veijonen, T. ve Ahola, J. (2007). "A Disaster Information And Monitoring System Utilising Earth Observation", *Management of Environmental Quality*, 18(3), 246-262.
- Manzur, İ. ve Cemalüddin, M. (1990). Lisanu'l-Arap. Beyrut, Daru's-Sadr Yayınları.
- Matürîdî, Muhammed bin Mahmud Ebu Mansur Semerkandî (2003). Kitabu't-Tevhid Tercümesi, (Çev.: Bekir Topaloğlu), Ankara: İSAM Yayınları, 225.
- Natural Hazards and Disaster Management (2006), A Supplementary Textbook in Geography for Class XI on Unit 11: Natural Hazards and Disasters, Delhi: Central Board Of Secondary Education - Preet Vihar, Delhi.
- Natural Hazards and Disaster Management. A supplementary textbook in geography for class XI: Central Board of Secondary Education, http://www.preventionweb.net/files/4002_CBSENatHazDMCurricClassXIGeog.pdf, (21.06.2015).
- Özcan, A. Ş. (2011), Afet ve acil durum yönetimi: Mahiyeti, ilgili kurumları ve kapsamı. *İdarecinin Sesi Dergisi*, 144, 11-16.
- Özkul, B. ve Karaman, A. E. (2007). Doğal afetler için risk yönetimi. TMMOB Afet Sempozyumu Bildiriler Kitabı, 251-260.
- Sabunî, Nureddin Ahmed b. Mahmud b. Ebi Bekir (1978). el-Bidâye fi Usûli'd-Din/Mâtürîdiyye Akâidi (Çev.: Bekir Topaloğlu). 3. Baskı, Ankara: DİB Yay., 134.
- Tunç, C. (1987). Kader ve Kaza Hakkında Düşünceler. *Erciyes Üniversitesi İlahiyat Fakültesi Dergisi*, 5(4), 6.
- Türk Dil Kurumu (TDK) (2006). "Güncel Türkçe Sözlük". <http://www.tdk.gov.tr/>, (04.03.2015).
- Tüz, Melek (2004), *Kriz Yönetimi*, İstanbul: Alfa Yayınları.
- United Nations International Strategy for Disaster Reduction (UNISDR) (2009). Terminology and Disaster Risk Reduction. <http://www.unisdr.org/>, (12.05.2015).
- Yavuz, Y. Ş. (2001). Kader. İstanbul: DİA, , XXIV/58.
- Yazır, Elmalılı M. Hamdi. "Hadid Suresi". *Hak Dini Kur'an Dili*. İstanbul: Zehraveyn Yayınları, 7, 435.
- "Yasin Suresi". *Hak Dini Kur'an Dili*. İstanbul: Zehraveyn Yayınları, 6, 403.
- "Yusuf Suresi". *Hak Dini Kur'an Dili*. İstanbul: Zehraveyn Yayınları, 5, 70.
- Yılmaz, A. (2003). *Türk Kamu Yönetiminin Sorun Alanlarından Biri Olarak Afet Yönetimi*. 1. Baskı, Ankara: Pegem A Yayıncılık.
- Yılmaz, S. (2011). *İman Hakikatleri Serisi - 1:İlahi Sır Kader*. İstanbul: Feyyaz Yayınları, 12. www.dinimizislam.com, (25.12.2020).

Extended Abstract

Aim and Scope

This research is about the level of relationship between the knowledge and consciousness levels of the individuals living in Gümüşhane and their belief in destiny and how they are prepared for disasters. In our study, our aim is to measure people's disaster knowledge, examine their fateful beliefs and investigate the relationship between disasters and fatalism.

Methods

In the preparation of the questionnaire of our research, the studies of Üzeyir Ok in 2011 and Saffet Snowball in 2013 were used. Demographic information was measured with 6 questions, Disaster Awareness with 30 questions and Kadersel Attitude with a single question. Descriptive

statistics and chi-square test were used in our study. The options used in disaster awareness questions are arranged according to double (Yes-No) rating. Demographic findings and disaster awareness were evaluated with tables and graphics. The relationship between belief in fate and disaster awareness was determined by Kikare. SPSS 20 package program was used in the analysis of the data.

Findings

In the study, the following data were obtained by testing the hypothesis "There is a relationship between Disaster Consciousness and belief in destiny".

Of the 385 people participating in the survey, 117 are women (30.4%), 268 are men (69.6%). Considering their marital status, 184 of them were married (47.8%), 172 were single (44.7%), 20 were widowed (5.2%), and 9 were divorced (2.3%). Considering the age groups, 109 people in the 18-25 age range (28.3%), 110 people in the 26-34 age range (28.6%), 101 people in the 35-45 age range (26.2%), 49 people in the 46- 55 years old (12.7%) and 16 people are 56 and over (4.2%). Of the 385 people surveyed, 52 were primary education (13.5%), 108 high school (28.1%), 64 associate degree (16.6%), 108 undergraduate (28.1%), 31 of them graduate (8.1%) and 22 received doctoral education. When their income is examined, 160 people (41.6%) with an income between 0-1500 TL, 98 (25.5%) between 1501-2500 TL, 60 (15.6%) between 2501-3500 TL, 3501 47 (12.2%) between -4500 TL and 20 (5.2%) with 4501 TL and above. In terms of occupation, 107 people (27.8%) civil servants, 69 people (17.9%) workers, 34 people (8.8%) self-employed, 33 people (8.6%) housewives, 14 people (3%) 6 farmers, 80 people (20.8%) students, 7 people (1.8%) unemployed, 11 people (2.9%) traders and 30 people (7.8%) from other professions.

When the views of 385 people who participated in the question about belief in destiny were examined, 69 people (17.9%) stated that fate was determined by people completely, 240 people (62.3%) determined both by themselves and by God, 70 people (18.2%) He stated that only God drew destiny. 6 people (1.6%) did not report their views on fate.

To the third question about disaster awareness, "I stand close to the window and balcony in order to leave early during an earthquake" question, people whose belief in fate only determines themselves say yes, while those of other types say no. To the 12th question of disaster awareness, "I know very well what to do in case of fire" question, people whose belief in fate only determines themselves say no, while those who have other types of faith belief say yes. To the 13th question of disaster awareness, "To learn the fire extinguisher" question, people whose belief in fate only determines themselves say no,, while those who have other faith beliefs say yes.

Conclusion

As a result of the chi-square analysis, a change was found in only these 3 items of 30 items related to disaster awareness, and the answers given to the other questions did not show a significant difference according to the types of belief in fate. Although there is a statistically significant difference between the answers given to these three questions, it is concluded that disaster awareness does not differ according to the types of belief in destiny when other questions are considered in general, that is, our hypothesis was rejected. Based on the findings we obtained from our study, it can be said that individuals residing in the city are not ready for a possible disaster. What is pleasing about the results is that there is no relationship between belief in fate and disaster awareness. Because regardless of the people's view of fate, disaster awareness can be increased with the necessary education and activities.