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InTraders 2019

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Project Coordinator
Kürşat ÇAPRAZ

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Appreciation

The main objective of the book is to provide a platform for researchers to present and discuss their studies in the social sciences. The scope of the studies included in the book; business, economics, international trade, public administration and political science. It is also planned that a book study will be held in future InTraders Conferences. We would like to express our gratitude to the authors of the studies in the book.

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Abdulkerim Yaldoz & Canan Senturk
Interculturality and Trade

Marinică Tiberiu Șchiopu

Abstract

The present study is an analysis of the connections established between the intercultural phenomenon and trade. Both intercultural contacts and commerce appeared and developed due to humans’ mobility and their basis was exchange (either spiritual or material). Since the dawn of history people travelled a lot and exchanged knowledge and goods (for instance, silk was brought to Europe by two Byzantine monks from China, in 550 C.E.), so, travel generated interculturality and trade. Intercultural contacts can be positive (trade, for example) or negative (wars). One can say that interculturality is a trait of the human species. Many innovations in different fields spread due to intercultural exchange, globalisation is also based on cross-cultural or intercultural contacts. The Industrial Revolution and colonialism represented the main causes of the intensification of intercultural contacts which generated an increase in international trade. In contemporary human society, this kind of relationships is essential for development in any activity field. The globalised trade in nowadays world was generated by interculturality and World Trade Organization was founded to facilitate it and to create an international network; the technological evolution and the modern means of transport enhanced the relations between different cultures.
Interculturality is an umbrella concept covering a diversity of domains: communication, religion, education, anthropology, literature etc. In this paper, we try to answer to the following question: “How can interculturality influence trade or vice versa?” by pointing out the main aspects of the analysed phenomena and their links. To accomplish this task we shall make use of the historical method and imagology.

**Keywords:** Contact, exchange, globalisation, interculturality, international trade.

**JEL Codes:** B17, B27

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**Interculturality: A Human Trait**

*Interculturality* represents the contact between different cultures. *Multum in parvo* the analysed concept implies situations when individuals pertaining of two or more cultural backgrounds get together and share their specific customs, thoughts, ideas, beliefs, knowledge or even material goods. Interculturality is considered “both a field and an analytical concept” (Rozbicki 2015: 2). In this paper, we shall briefly explore the history of *interculturality* and try to identify the reciprocal influence between *interculturality* and *trade* using the historical and imagological methods.

Nowadays academicians stress more and more the importance of the *intercultural dialogue*, taking into account globalisation and the enhanced mobility of humans due to the development of transportation and communication means. The intercultural dialogue was defined by The Council of Europe as:

“A process that comprises an open and respectful exchange between individuals, groups and organizations with different cultural backgrounds or world views. Among its aims are: to develop a deeper understanding of different perspectives
Interculturality and Trade

...and practices; to increase participation (or the freedom to make choices); to ensure equality; and to enhance creative processes” (CoE, 2008).

The intercultural dialogue is vital for any union or organization worldwide, especially for multinational ones; without it, these socio-political or economic structures cannot survive because at some point will appear problems due to cultural differences.

Due to the increased importance of interculturality, there appeared new fields of research such as intercultural communication and intercultural education. These two concepts were strongly interrelated in the process of globalisation, as Claudio Baraldi noticed:

“The increasingly multicultural character of society has invested education with an important new task. In multicultural settings, education is intertwined with intercultural communication; this means that interactions have to include the treatment of cultural diversity, expressed by differences in cultural presuppositions” (Baraldi, 2009: 20).

*Intercultural education* implies another important concept: *intercultural adaptation*, “the characteristics that are shared by people who learn to function well in a new cultural environment” (Shaules, 2007: 84).

People travelled and shared their goods and knowledge since the dawn of history. Travel and exchange are the main principals of the intercultural dialogue, so, can be said that interculturality is a human trait. There are no isolated cultures in the world, for instance, the borders of Communist Romania were almost closed for Romanians but the country continued an intercultural dialogue especially with Middle-Eastern countries.

*Interculturality* is interrelated with *alterity* and Michael Taussig named the ability of humans to represent the Other as “mimetic faculty” (Taussig, 1993: xiii). So, interculturality can
be understood as an oscillation between identity and alterity; identity considered as “the sum of different characteristics seen as facets or aspects of self and which seem to pre-exist the contexts within which the individuals operate” (Angouri, 2016: 39). Ric Knowles expressed his propensity for the term *intercultural* in spite of other concepts such as:

“I prefer ‘intercultural’ to the other terms available – cross-cultural, extracultural, intracultural, metacultural, multicultural, precultural, postcultural, transcultural, transnational, ultracultural, and so on – because it seems to me important to focus on the contested, unsettling, and often unequal spaces between cultures, spaces that can function in performance as sites of negotiation” (Knowles 2010: 4).

Thus interculturality could be considered as a negotiation and osmosis process between different cultures and communities on the one hand, and between individuals on the other. This process is carried on through the medium of a dominant language, which is nowadays English:

“The number of English speakers has grown to 1.5 billion people. English is designated as an official language in as many as 62 nations. English is the most dominant language in scientific communication, being the language of 70-80 percent of academic publications. English is the de facto official and working language in most international organizations” (Tsuda, 2008: 167).

And it was related by Yukio Tsuda to neocolonialism, causing inequality and discrimination. But to develop a successful business a company must use the new *lingua franca*: English, in spite of any shortcomings. In Romania, due to the insertion of many English words into the Romanian language in certain domains or among teenagers, linguists created a new concept:
romgleză\textsuperscript{2} – a new language variety generated by the mixture of English loan words and Romanian language.

**Interculturality or Travelling across Cultures**

Since Antiquity people started to travel and exchange goods, so this was the beginning of the trade. The best places for intercultural dialogue were the main trade routes such as *The Silk Road*, which linked the Far East and Europe. These huge roads went across a lot of different peoples and cultures creating opportunities not only for commercial activities but also for intellectual and spiritual exchanges. For instance, silk was brought to Europe from China in the 6th century CE on The Silk Road. On the same route several legends and beliefs spread from the Far East to Europe, an outstanding example is the legend of Buddha which was transformed into a Christian novel (*Varlaam and Ioasaf*) during its travel from India to Europe. Another important example of Indian book that travelled across the Middle East to Europe is *Pañchatantra*\textsuperscript{3}, one of the most important literary creations of Indian culture:

“Iranian literature had been a link between ancient Indian literature and Arabic literature in respect to this literary classic. In the reign of Khosrau Anushirwān, in the sixth century AD, his personal physician, Barzawayh, had received a copy of the Indian book, *Panchatantra*, and transferred it to the Pahlavi language by adding some other stories […] Later, Abdullah

\textsuperscript{2} The English influence on the Romanian language increased after The World War II, and it was due to the necessity to express new extralinguistic realities, for instance: *e-mail*, *chat*, *internet*, *software*, *mouse* etc. In sports, there were borrowed a lot of new terms: *tenis*, *fotbal*, *baschet*, *fitness* etc too.

\textsuperscript{3} *Pañchatantra* was compiled, according to some researchers in the third century BCE in India, “even before being compiled in book form, the tales were transmitted orally from one generation to another in the Pali language. Some other researchers suggest that the *Pañchatantra* was composed initially in Sanskrit, in a form very close to what we know nowadays, between the 3rd and the 5th centuries AD” (Grigore, 2018: 73).
bin al-Muqaffa translated the book from Pahlavi into Arabic, in the middle of the eighth century AD” (Shamsuddin et al., 2013: 2).

Due to interculturality, we can use the Arabic numerals which evolved from Brahmi\(^4\) script (used in the Indian subcontinent between the 5th century BCE and the 4th century CE). They were called Arabic because the Arabs adopted them from Indians as a consequence of their commercial activities. Another result of the intercultural dialogue is the spread of the Roman alphabet in the entire world and its evolution from the Phoenician\(^5\) alphabet. On the other hand colonialism, in spite of its negative aspects, established intercultural contacts and supported all types of exchange. The colonial empires were established for commercial purposes, especially for the spice trade. Due to these contacts between cultures, we can enjoy sugar, tea and spices in the West.

Interculturality means interdependence and interconnectedness on different levels: spiritual, linguistic and commercial. In Linguistics, interculturality manifested as loan words. Languages established contacts on different purposes and circumstances (trade, invasion or, nowadays, tourism and education). As a result of these relations, words migrate from one language to another (usually from an older/more influential language to a younger/peripheral one). For instance, in Romanian language

---

4 Brahmi script is the oldest Indian writing system that was used between the middle of the first millennium BCE and the middle of the first millennium CE.

5 Phoenicians inhabited the ancient land that nowadays is Lebanon and called themselves Canaanites, a name related to their main activity – trade: “The ancient inhabitants of Lebanon did not call themselves Phoenicians. This term is of Greek origin, appearing for the first time in Greek texts in the 9th century BC; its meaning is still not fully clear. The most accepted explanation, although by no means the only one, is that the Greek word \textit{phoinix}, meaning ‘red’, alludes to the purple textile industry for which the ancient inhabitants of Lebanon were made famous. The Phoenicians actually called themselves Canaanites and their land Canaan, at least until the first century AD, as documented in the New Testament […]” (Kaufman, 2014: 2).
there are over 1000 loan words from Turkish due to the Ottoman conquest and rule over Romanians⁶ (about five centuries of Romanian – Ottoman historical relations), examples: cearșaf, cerdac, chibrit, dulap, dușumea, ciorbă, iaurt, cafea, dușman, cioban, haide etc.

The Middle East acted as a cultural bridge between India and Europe. Some linguistic evidence in this respect are the words: enemy and guest; in Romanian, their counterparts are dușman and musafir, in Turkish düșman and misafir or Hindi dushman and musaaphir. Another interesting borrowing that came into Romanian through Turkish from Sanskrit⁷ is ceacâr (a traditional tool for wool processing that consists of a wheel) from the Sanskrit chakra (wheel).

The Romanian people itself is a result of intercultural relations between Romans and Dacians; after the Romanian ethnogeny the intercultural contacts with peoples from Asia continued:

---

⁶ The influence of the Turkish language on Romanian manifested for almost five centuries, from the late fourteenth century AD to the middle of the nineteenth century AD. But this influence has continued until nowadays especially in Dobrudja, on a lower intensity. The main result of this linguistic and intercultural contact was the borrowing of about 2,750 Turkish words into the Romanian language, the majority of which are not used anymore, only one third being used nowadays in different areas of Romania and on different stylistic levels of Romanian language. The Turkish influence on Romanian occurred mainly in vocabulary, this superficiality being caused by the huge differences in mentality and religion between the two peoples.

⁷ Sanskrit is an Indo-European language which “belongs, more specifically, to the Indo-Iranian branch of Indo-European. The other most important member of this branch is Persian. The earliest Indo-Iranian speakers are conveniently known as Aryans, from the name they gave themselves (Sanskrit ārya, Avestan airya – from the latter the modern name Iran is derived, while the name Eire, at the other end of the Indo-European spectrum, may also be cognate). Although it is reasonable to assume that the original homeland of the Aryan tribes was to the north of the Caucasus, our earliest record of them comes neither from this region nor from Indo-Iranian area but from south of the Caucasus, from the Mitanni Kingdom of Northern Mesopotamia, where a ruling dynasty bearing Aryan names and worshipping Aryan gods such as Indra had established itself in first half of the second millennium BC” (Coulson et al., 2003: xiii).
“I also see a fourth significant component, namely the Turkic peoples arriving from Central Asia in successive waves, such as the Avars, the Pechenegs, the Oghuz Turks and the Cumans, most of whom spoke Turkic languages, related to Ottoman Turkish. For example, the Pechenegs and the Cumans ruled over our territory east and south of the Carpathians for 350 years, and it was there, in the lands our neighbours called ‘Cumania’ up to that time, that the first organised Romanian state appeared at the turn of the 13th and 14th centuries, namely Wallachia (Romanian: Țara Românească)” (Djuvara, 2014: 7).

This is the explanation of the presence of loan words and customs from so many different peoples into Romanian culture and language. There are no pure peoples in the world, every people is the result of a mixture of many populations and ethnicities, proving that humans have always migrated.

**Intercultural Trade**

In the process of globalisation, the intercultural relations and contacts represent a crucial factor because this is the age of cultures in contact more than ever. Nowadays, people talk about *intercultural business*, that type of business that occur between representatives of different cultures; in the same manner, one can speak about *intercultural trade* – the commerce developed between and across cultures. The intercultural trade implies different aspects to be considered by the parties involved: the culture and religion of the traders, the laws of the target countries and the language. When one considers developing trade/business with other countries he/she previously must learn about the cultural profile of those countries, for example: what is the situation of gender equality or what are the laws concerning trade. For better communication, they must use translators.
As previously said, the intercultural trade/business is not a new phenomenon, it is almost as old as humanity:

“In fact, people of different cultures have been communicating with one another of business matters for 5000 years or more. However, the beginning of the twenty-first century has brought dramatic changes in the ease, frequency, and necessity for intercultural business relations. These changes are due primarily to improvements and innovations in electronic communications: the Internet, e-mail, fax, TV, radio, and teleconferencing help banks and corporations to carry on global business affairs. As a result, the car you drive probably contains parts from several nations. Your computer may contain chips and other components from hals a dozen countries or more” (Bell and Williams, 1999: 14-15).

The knowledge about different cultures can improve trade, if one thoroughly knows a foreign culture, that person may consider developing a business with representatives of the target culture (import or export): “If the company wishes to grow, it may look beyond the domestic market and decide to export. For this, it will need to adapt its products or the services to the foreign market and negotiate with prospective partners abroad” (Gibson, 2002: 3). For example, Romanians grow a large number of sheep especially for the Arab countries, on the basis that Muslims consume lamb meat during religious holidays.

Intercultural relations are closely linked with trade and communication, people from different regions of the world can easily contact one another through the medium of modern communication means, so this leads to the improvement of trade:

“First, global trade expanded rapidly, leading to labor-intensive industries redirecting their sourcing to countries
where the cost of labor was significantly lower. Second, the phenomenal decrease in the cost and increase in the speed of communication, particularly via cellular/mobile phones and the Internet meant that news of events in remote locations could be broadcast within seconds of their occurrence through globalized media” (Bennett, 2015: 120).

On the other hand, commercial relations can improve intercultural ones. For instance, the increasing trade between Romania and China generated a greater interest among Romanians to learn the Chinese language at the academic level to get a job as a translator or to work in Chinese companies. So, interculturality sustains multilingualism and, as a consequence, enhances trade. In this case, *intercultural education* is crucial in the process of becoming a valuable specialist. Applications for international scholarships are invaluable in this respect. Students from poor countries can study in prestigious universities all over the world and, after graduation, they can back to their countries to help in the process of national development. And they could become spokesmen of their nation in the intercultural dialogue with all the other nations.

Now, more than ever, the mobility of students and scholars around the world is so much improved that generated the concept of *intercultural education* (which requires good *intercultural competence*):

“[…] in the past three decades, there has been a powerful transformation in the international landscape of higher education. It is no longer just people who are moving across borders; education programs, providers, projects, and policies are doing so as well. New information and communication technologies, especially social media and networks, expand and deepen educational partnerships. As a result, the intercultural dimensions and challenges are more complex and layered,
requiring intercultural competence as never before” (*ibidem*: 284).

International academic conferences can improve trade by establishing intercultural relations among the participants pertaining of different cultural backgrounds. The intercultural interaction between international participants could create opportunities for future trade projects while exchanging their experiences. So, the encounters between individuals of different cultural backgrounds represent more than that, they are encounters between nations and cultures, occasions for individual and national development.

**Conclusion**

Humans are social and intercultural beings creating international networks that often involve commercial relations. During human history, the intercultural dialogue was generated in most cases by trading reasons. Nowadays, intercultural contacts direct trade. The stronger is the intercultural dialogue, the better is the trade, in this respect, the usage of English as *lingua franca* strengthens the businesses and the companies can have a better development. Trade also improves interculturality by increasing the interest on alterity, the involved parties desiring to know one another better. Taking into account the current social situation at the international level, one can consider that the new concepts: intercultural trade, intercultural business, intercultural communication and intercultural education are very important and relevant; and the best way to achieve stability, peace and prosperity is through tolerance and interculturality.
References


Muammet Yunus ŞİŞMAN

Abstract

This study aims to empirically investigate the relationship between adult obesity prevalence and socioeconomic status (income, educational attainment, and unemployment) for the United States. The paper employs county level data obtained from the Behavior Risk Factor Surveillance System (BRFSS) 2009. The findings of the study suggest demographics have significant impact on obesity. In addition, an increase in income and unemployment levels stimulates the prevalence of obesity and overweight. OLS model estimations indicate college education significantly reduces the likelihood of the obesity.

Keywords: Obesity, Socioeconomic Status, Unemployment

JEL Codes: I12, I14, I18

Introduction

Obesity is a significant public health issue in the United States according to Centers for Disease Control and Prevention reports (hereafter CDC). For several years, obesity has been one of the leading single causes of death in the United States for adult males and females. The aim of this paper is to show

1 PhD, Faculty Member, Kütahya Dumlupınar University
the importance of educational, economic and occupational factors, socioeconomic status, in determining obesity risk in United States at the county level. The study investigates a cross sectional analysis for all reported counties in NHANES annual survey (2009). The analysis only covers U.S adults who are 25 years old or elder. The study also identifies the likelihood of high occasions of obesity in counties at the cutoff point 30% given by CDC by using logistic regression including interaction terms specifically for education.

Obesity and overweight trend and other health related data for the analyses are obtained from the National Health and Nutrition Examination Survey (NHANES). Demographics, income and unemployment data are also obtained from U.S. Department of Labor, Bureau of Labor Statistics and U.S. Census Bureau. All data are at the county level for the 2009. The data cover District of Columbia, Alaska and Hawaii.

**Literature Review**

Existing literature provides evidences that lower socioeconomic status is generally related with higher rates of overweight and obesity in developed economies (Jeffery et al., 1989; McMurray et al., 2000; Reidpath et al 2002; Reijneveld, 1998; Rosin 2008; Sundquist & Johansson, 1998; Zhang & Wang, 2004). We attempt to explain the causal impact of socioeconomic status on obesity, overweight and clinical weight classification in this study.

The obesity epidemic ranks among the leading 10 global public health problems (WHO, 1998). Physical inactivity and bad diet were the second main cause of death in the US in 2000. Obesity may worse than tobacco as the leading cause of avoidable death (Mokdad et al., 2004; Wolf and Colditz, 1998). Obesity is a sophisticated medical case, which has social and
psychological dimensions and some major economic aspects. It affects people of all ages and socio-economic groups, and of both genders, and is not restricted to developed countries (WHO, 2000).

**Data and Methodology**

Original data was in general number format having a variety of units of measure. The data transformed into the logarithmic form, as it is the most common transformation used to stabilize data. However, following the log transformation, many of the variables have almost perfect correlation (see Figure 1). While the initial analysis showed that normality assumptions is satisfied, interpretation would be difficult due to these varied units of measure. Given this issue, our team decided to transform the data to eliminate the issue.

![Figure 1. Correlation among the Variables](image-url)
We then transform all variables to percentage format, excluding the median income variable. The demographics variables are having collinearity problem. The “whiteonly” variable and the “blackonly” variables have high negative correlation, and as such, therefore, the “blackonly” variable excluded from the analysis. The following variables in Table 1 are included in the final estimation.

Table 1. Variables Definitions

<table>
<thead>
<tr>
<th>Variable</th>
<th>Definition</th>
<th>Source</th>
<th>Expected Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>numobeses</td>
<td>People with BMI &gt; 30, measured in percentage</td>
<td>CDC</td>
<td>Dependent variable</td>
</tr>
<tr>
<td>numphysicallyinactive</td>
<td>people physically inactive (other than working time)</td>
<td>CDC</td>
<td>(+)</td>
</tr>
<tr>
<td>numunemployed</td>
<td>people unemployed at county level</td>
<td>BLS</td>
<td>(+)</td>
</tr>
<tr>
<td>females</td>
<td>Percent females</td>
<td>U.S. Census Bureau</td>
<td>(+/-)</td>
</tr>
<tr>
<td>lessthanhighgrade</td>
<td>low level of education: less than 9th grade</td>
<td>U.S. Census Bureau</td>
<td>(+)</td>
</tr>
<tr>
<td>hightgrad</td>
<td>medium level education: 9th but less than HS grad</td>
<td>U.S. Census Bureau</td>
<td>(+)</td>
</tr>
<tr>
<td>graduateormore</td>
<td>high level education</td>
<td>U.S. Census Bureau</td>
<td>(+)</td>
</tr>
<tr>
<td>whitesalone</td>
<td>Percent white people</td>
<td>U.S. Census Bureau</td>
<td>(-/+ )</td>
</tr>
<tr>
<td>medianincome</td>
<td>dollar amount of median income</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A linear regression is estimated on the data set (in percent format) to see what could be observed. Using the diagnostic panel the regression output, we looked to check the normality assumptions and the linear relationship of the variables to the response variable (numobeses).
Figure 2. Model Diagnostics

Figure 2 illustrates the model diagnostics. We can conclude that the normality assumptions are satisfied. The residual versus predicted value plot shows a fairly random distribution of data. The QQ plot shows the data falling along a very straight line. The fitted versus predicted value plot also shows the points falling along a linear pattern, and the histogram of the data looks good as well.

The study employs Mallow’s Cp and an adjusted R² subset procedure to see which subset of variables might create the best model for this problem.
### Table 2. Model Selection Process

<table>
<thead>
<tr>
<th>Number in Model</th>
<th>C(p)</th>
<th>R-Square</th>
<th>Adjusted R-Square</th>
<th>Variables in Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
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<td>0.5955</td>
<td>0.5946</td>
<td>physicallyinactive of unemployed income females whitealone hsgrad higedu</td>
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<tr>
<td>6</td>
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<td>0.5944</td>
<td>0.5936</td>
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</tr>
<tr>
<td>6</td>
<td>16.590</td>
<td>0.5941</td>
<td>0.5933</td>
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<tr>
<td>6</td>
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<td>0.5934</td>
<td>0.5926</td>
<td>physicallyinactive of unemployed females whitealone hsgrad higedu</td>
</tr>
<tr>
<td>5</td>
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<td>0.5921</td>
<td>physicallyinactive income whitealone hsgrad higedu</td>
</tr>
<tr>
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<td>0.5926</td>
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<tr>
<td>6</td>
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<td>0.5913</td>
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</tr>
<tr>
<td>4</td>
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<td>0.5907</td>
<td>physicallyinactive whitealone hsgrad higedu</td>
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<tr>
<td>5</td>
<td>39.448</td>
<td>0.5909</td>
<td>0.5902</td>
<td>physicallyinactive of unemployed income whitealone higedu</td>
</tr>
</tbody>
</table>

Based on the results presented in Table 2, the proposed model for estimation includes 7 variables (the highlighted one with the C(p) of 8.00 which is the lowest value with highest $R^2$) and from that output saw that the assumptions were good and the model was significant (F test) with all variables linearly related (t-tests).
### Table 3. Model Estimation

| Variable       | Label         | DF | Parameter Estimate | Standard Error | t-Value | Pr > |t| |
|----------------|---------------|----|--------------------|----------------|---------|-------|-----|
| Intercept      | Intercept     | 1  | 10.39401           | 3.30373        | 3.15    | 0.0017|
| physicallyinactive | physicallyinactive | 1  | 0.38551           | 0.01341        | 28.75  | <.0001|
| ofunemployed   | ofunemployed  | 1  | 0.05352           | 0.01644        | 3.25    | 0.0011 |
| income         | logmedianincome | 1  | 1.15774           | 0.28574        | 4.05    | <.0001|
| females        | Females       | 1  | 0.06523           | 0.02281        | 2.86    | 0.0043|
| whitealone     | White alone   | 1  | -0.07819          | 0.00332        | -23.52  | <.0001|
| hsgrad         | Hsgrad        | 1  | 0.05472           | 0.01062        | 5.15    | <.0001|
| highedu        | Bs or more    | 1  | -0.11152          | 0.01058        | -10.54  | <.0001|

From this one can see that the model is significant (p-value of F test) and that the dependent variables all have a linear relationship with the response (p value of t tests), with the model explaining a little over 59% of the variation in the response variable (r square). Also the residuals, using the residual by regressor plots for that analysis. The output can be provided upon request. The study also includes two different scatterplot sets to visually diagnose the data (provided upon request) and found no issues in either of these plot sets. Practically speaking, we would use this model to predict what change to “obeses” would happen with a one unit change in any of the dependent variables, with all other variables remaining constant. So, for example, a one unit change in the percent of females within a county would result in a .065 increase in the percent of obese people in that county.
Conclusion

Given all the analysis, we can use the following set of variables to effectively model the obesity to explore what drives increases or decreases in the obesity levels in any county in the United States. The findings of the study suggest that the main cause of obesity is the physical inactivity. The findings also indicate that racial and gender characteristics are significant factors affecting obesity prevalence in the United States. Furthermore, income and employment status along with educational attainment are among the key determinants of adult obesity.
References

Centers for Disease Control and Prevention. Available at: http://www.cdc.gov/obesity/index.html


Impact of Unethical Advertisement and Brand Consumption on Consumer Buying Behavior

Shafaq AFTAB
Muhammad Bilal MUSTAFA
Muhammad Umair NAQEEB

Abstract

Advertising is a very crucial step for every organization to create awareness about the product they offer to the consumers. It creates the first image in the consumer’s mind that how it is creating value for the consumer, how the company is offering different products in comparison with other competitors. What company claims about their product and to what extent they are true or meeting their claims when it comes to the actual performance of the product. In this paper, we will measure the impact of unethical advertisement and brand consumption on consumer buying behaviour. To see the behaviour of people when people perceive a company is advertising unethically and people consume it to check the claims of the company than whether the consumer will prefer that product again after the deceptive claim? or whether the consumer will quit that product for forever and will not trust that brand again. To examine this, we have distributed 200 questionnaires to a random sample fast food industry and analyse the relationship of the variables by using regression through SPSS. This study

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finds a strong relationship between the independent and dependent variable.

**Keywords:** Unethical advertisement, misleading information, deceptive claims, Consumer buying behaviour, brand consumption.

**JEL Code:** E21

**Introduction**

The major purpose of most effective marketing strategies to differentiate their selves among the competitors by ensuring their customers that they are creating value in their products for their customers against the price of the product. Some company create value for their product by cutting the cost of their product to offer the best price to their consumers by making their product line and operations effective and efficient that will help the company to cut the cost of the product this strategy is called as a cost differentiation strategy. Some companies attain competitive advantage by making their internal operations efficient that is also the viewpoint of Resource-Based view in which companies achieve sustain competitive advantage by holding four components that resource can be tangible and intangible and these resources should be heterogenous and immobile and must have these attributes such as valuable. Rare, not imitable and organized to create value to sustain competitive advantage (Barney, J., Wright, M. and Ketchen Jr, D.J., 2001).

Some companies opt differentiation strategy to sustain competitive advantage by offering unique features that other competitors do not offer to their customers, however, companies that adopt this strategy usually do not compromise on the quality of product and do not compromise on offering same or high prices to the customers. Some offer a totally different
unique product to the customer that provides the best solution to their customers in comparison with other competitors. Now a question arises here, that how the company will communicate these features through advertisement but what are the ethical code of conduct in creating an advertisement of product to create awareness about the product. Because the advertisement is the best source that companies must communicate with their target audience. But some companies play different tactics to make their audience fool by doing unethical advertisement. Before there was only one-way communication. But now in today’s era customers can also communicate through different feedback forum, through different social media blogs where they write a review of the product after consuming the product that is brand consumption.

Advertising is a paid form of publicity in which sponsor select any advertising agency to deliver its product offering in a more attractive manner by keeping an edge on their competitors to the consumers. But the problem here is that many companies are just focusing on making money not on retaining loyal customers by offering them value products. So, for that reason many companies do wrong claims about the product features that they deliver in their ads, through social media, newspaper, Brochures and through other forms of print media. As we want to measure the impact of unethical advertisement on consumer buying behaviour. Many customers even do a review of the product and give a rating to that product to aware and safe other people from wrong and deceptive claims, by comparing the actual product performance with the claim or desired the performance of the product so these things exist under brand consumption. As, we also want to measure its impact on consumer buying behaviour that to what image customer creates in their minds after using certain
product first time and how they will respond to that purchase and that to what extent it meets the customer’s expectation, either it functions as claimed by the company and will the customer will rebuy that product again? or Will trust that brand again? Consumer buying behaviour will depend upon the product performance and perceived the brand image if the company is offering that product that adding value to the product in comparison with their other competitors or available substitute product. Customer will rebuy that product again but what if the company is claiming something else about their product. For instance, after the one-week usage of this fairness cream, you will get three-tone lighter skin. So, now the company is claiming something about the product functioning. When customer will use it and compare its actual performance with the real performance if it will meet the customer desire expectation than the customer will re-buy it. but if it does not fulfil its claim, the customer will not trust that brand again or might will not buy any future product of this company.

**Scope of the Research**

As we know the company communicates with the consumers through advertisements, so companies should keep in mind the ethical standards of making advertisements to not harm the consumers. So, the study will help the practitioners, marketing personnel’s to better understand the consumption pattern of consumers and to what extent they should implement ethical standards in making ads and this study will also help marketing managers to implement marketing strategies in more practical manner to understand that how consumption of certain product will make perception in consumer’s mind and to what extent it will influence the buying behaviour.
Research Objectives
- To understand buying behavior of consumer after perceiving false advertisement.
- To find the impact of factors relating to unethical advertisement on consumer buying behavior.
- To find the impact of factors that related to brand consumption on consumer buying behavior.

Research Question
Our research question is, “What is the impact of unethical advertisement and brand consumption on consumer buying behavior?”

Significance of the Problem
- Effective and ethical advertisement are a source of competitive advantage for the organizations. This research will enable Marketing professionals to maintain this competitive advantage by understanding consumer’s buying behavior which will help in devising marketing strategies and retaining loyal consumers.
- The research will enable practitioners, marketers and researcher to increase customer satisfaction and their product performance by understanding the reasons underlying consumer buying behavior to quit unethical ads and by taking remedial actions.
- As unethical advertisement can lead to actual quitting, it will help managers to understand to what extent they can reduce the deceptive and false claims related to their products. For instance, consumer will might quit the product after perceiving that actual performance of the product is not meeting desire expectation.
Impact of Unethical Advertisement and Brand Consumption on Consumer Buying Behavior

- It will enable Marketing managers to take corrective actions against false advertisement to retain satisfied customers.
- This study will help us to understand the buying behavior of different customers who believe in trustworthy brands and it is also a challenge to question their perceived perception in comparison with their unethical claims.
- The research will contribute to the literature of consumer buying behavior and to study integrative marketing communication thoroughly to eliminate all components related to false or deceptive advertisement at every step.

Literature Review

Consumer Buying Behavior

There are many components affecting customer’s conduct to purchase, such as social interactions and demography impacts a lot. For example, family and friends have influence and the effect of promotion and interior also have an impact such as observation, learning and state of mind. The author states many subjects for example difference in customer choices related to the product, their buying contribution and inclusion of items. Judgments of individuals are underscored and it is suggested that tangible segregation is the capacity of a person to identify comparative boosts, which include many variables that are identified with individual inclinations (Hawkins, Best, Coney and Mokherjee, 2000).

Individual buying pattern is different from the gatherings. It is stated as individual contrast from others. The individual choice making for a buy choice is not always the same as family choice making. There are contrasting variables that have an effect on customer buy choice. The book concentrated on the
life cycle of family and necessities is different from all buyers which are aimed at different life stages. The family choice settling is focused as a cooperative choice making because family demands the importance and it is thought as important in the business sector.

The changing business domain is unstable as at no other time and the administration business as encouraging as at no other time. In this length of unusual competitor organizations states that customer is the main ruler in the business domain and achievement of any organization depends on the effectiveness of administration. The duty depends on the collaboration to makeup up a society, obligation, morals, and quality management should be offered to complete a more elevated degree of consumer loyalty. Changing the buying behaviour buyer is required to break down many variables affecting customers to buy choice by themselves or in a round about way.

**Unethical Advertisement**

Advertising plays an essential role in the organization to increase product sales as it is one of the important source through which a company can create product awareness among its customers. New technology advances have evolved new sources for the organization to advertise their product such as through social media, different applications, paper media and T.V ads. Etc. For making ads company should be aware of the ethical code of conduct in creating ads. That will help the company to keep their image good in consumer’s mind and will help them to sustain their image by saving their selves from the deceptive claims that create fantasies about the product features and quality in consumer’s mind (Clow& Baack, 2007).
Ethics in advertising running from the issue of deceptive advertising, advertisement focused on kids, exploitation of sex and sexual orientation, furthermore the issues of subliminal advertisement (Treise, Weigold, Conna, & Garrison, 1994).

The advertisement has constantly raised its feedback measures from population and many studies have been done to determine the ranges of effects of unethical advertisement on customers. Studies implied that buyers think if you advertise regularly it will harm moral standards (Carson, Wakutch, & Cox, 1985).

According to Armstrong, Gruel and Russ (1979) the three main essential parts of deceptive advertising is a lie, importance and conviction. According to deontological point of view that if a promoting situation is misleading than it can lead to the activities empower mixed up by the buyers. A commercial is misleading or beguiling just on off chance that a person is aware of it or focused by it would come to hold as a false conviction because of presentation to it (Attas, 1999).

If you are publicizing something with trick then it will have contended as unethical, in general, it is presuming that it is wrong to damage others (Nebenzahl and JAFFE, 1998).

In an examination to comprehend the impact of nourishment commercial effect on youngsters’ taste inclinations demonstrates that kids between the ages of 3 to 5 years favour food and refreshments in bundling with the brand on it even though the same food was served in bundling without brand.

This example demonstrates how advertisement can impact kids even at an early age. Besides, kids are more presented to brutal activities by plugs advancing up and coming projects than by the TV programs or whatever other business because of the way that this business concentrate on the quintessence of occasions or arrangements in the programming that contains rough scenes to draw in more viewer.
**Brand Consumption**

A brand is a design, symbol, name feature and attribute that differentiate a product of one organization from the product of other organization in the mind of the consumer. Brand consumption means the frequency of the usage of the product. Consumer lifestyle affects consumer behaviour and brand preferences for use. Customers buy products of such brands which are appropriate for reflecting their self-image (Munteanu, 2014). Customers usually consume products that have a significant brand image so that they can easily express their own identity by using that product. They can easily portray their lifestyles also by brand consumption.

The consumer usually wants to purchase and consume that brand which competes with other major brands so that the quality of that brand is assured. Brand consumption also leads to brand loyalty. So, all businesses should build brands such that it can compete with the other major brands.

Personal values also affect the consumption of a brand. Personal beliefs and values are the consumer’s own individual beliefs about what should and what is desirable to them. People usually buy and consumes brand because they have a need for them. In addition, brand consumption is also generated and changed by social and cultural factors (Clawson and Vinson, 1978).

Most of the customers are loyal towards the brand and they repeat their purchase behaviour with that brand. But today, where competitors are searching how to attract the customers towards their brand, marketers should need to go far away just by depending on the behavioural loyalty which is consumption of the brand to other important factors to be sustainable in market conditions (Kevin Lane Keller, 2016).
Hypothesis Development

H1: Consumer buying behavior has a significant relationship with unethical advertisement

H2: Consumer buying behavior has a significant relationship with brand consumption

Research Methodology

The quantitative research strategy is used as the emphasis in our research is on the evaluation of data by quantifying it. The deductive approach is used in our research for hypothesis testing. The main objective here is to determine the impact of unethical advertisement and brand consumption on the consumer buying behaviour of customers. Non-Probability sampling technique such as Convenience sampling is used because we collected data from the respondents based on our convenience.

The research design used is causal research which is used to test whether one variable causes another to change like we were interested in defining factors related to unethical advertisement and brand consumption that may cause affect the buying behaviour or future buying behaviour of customers. It was a cross-sectional study as data was collected at one point in time. Moreover, research was conducted in a non-contrived setting as there was no interference with the normal work routine. The unit of analysis is individual because we collected data from individual customers of McDonald’s.

We targeted customers of McDonald’s for our research because customers can answer effectively about our variables as they are trusting and consuming McDonald’s for been a long time in they know everything that directly and indirectly influences their buying behaviour. How wrong or deceptive
claims will affect the buying behaviour or does unethical advertisement really affect the buying behaviour even if the customer has a strong brand image about the brand? Or whether after consuming one product, does customer compare the actual performance of the product with the desired product or will they rebuy the same product from a similar brand or organization. And will they trust that brand again?

We used a self-administered questionnaire as an instrument for the collection of the data. The questionnaire consists of a series of questions which are used to collect data from your participants. So, it is used as a research instrument (Gault, 1907). We used this research instrument in our study because it is inexpensive, easy to manage, easy to analyze and less time-consuming. In a limited time frame, you can get data from a large number of respondents and most importantly any doubts or queries of the respondents could be clarified on the spot. Before distributing questionnaires, we obtained consent from participants for volunteer participation. The questionnaires have been handed over by personal visit. The confidentiality of the responses has been ensured.

We floated 275 questionnaires of our research in the main franchises of McDonald’s and received 200 filled questionnaires from the customers. So, the sample size of our research is 200, i.e., n= 200. The questionnaires were administered in the English language and there was no backup translation because every person we targeted was educated enough to understand and respond to our queries in English.

The 5-point Likert scale was used to measure our dependent variable consumer buying behavior and independent variable brand consumption and unethical advertisement that was 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree.
We used regression method technique to measure how much variation of dependent variable (consumer buying behavior) is explained by independent variables (brand consumption and unethical advertisement). Also, we use regression analysis to predict and explain our theoretical model.

**Research Findings**

![Pie chart showing age distribution](image)

**Figure 1. Descriptive statistics: Gender**

In survey research, 59.50% respondents were males (coded as 0) who answered 119 questionnaires out of 200 questionnaires and 40.50% respondents were females (coded as 1) who answered 81 questionnaires out of 200 questionnaires.

![Pie chart showing gender distribution](image)

**Figure 2. Descriptive Statistics: Age**
Age of individuals less than 20 years (coded as 1) responded 10.50% questionnaires, Age individuals from 21 to 30 (coded as 2) responded to 51.50% questionnaires, Age of individuals from 31 to 40 (coded as 3) responded to 21% questionnaires, Age of individuals from 41 to 50 (coded as 4) responded to 11.50% and age of individuals above 50 (coded as 5) responded to 5.50% questionnaires.

In our survey, there were 2% PHD and metric or less respondents, 44% were master’s respondents, 45% were bachelors and 8.50% were intermediate respondents.

Income of individual less than 15k (coded as 1) responded to 10% questionnaires, Income of individual ‘15-30k’ (coded as 2) responded to 15% questionnaires, Income of individual ‘31-50k’ (coded as 3) responded to 28.50% questionnaires, Income of individual ‘51-65k’ (coded as 4) responded to 22% questionnaires, Income of individual ‘66-80k’ (coded as 4) responded to 9.50% questionnaires and Income of individual ‘Above 80k’ (coded as 5) responded to 15% of questionnaires.

Analyses

Regression and interpretation:

<table>
<thead>
<tr>
<th>Model Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>1</td>
</tr>
</tbody>
</table>

a. Predictors:(Constant), uad_mean, bcon_mean, age of individual, income, gender, education
Above table produces R-value and R square value of this research. R-value shows the correlation between variables and R square value shows the change in dependent variables caused by independent and control variables. R-value 0.771 or 77.1% correlation is there in independent and dependent variables. R square value 0.594 or 59.4% variation of the dependent variable (buying behaviour) is explained by independent (brand consumption and unethical advertisement) and control variables (age, name, gender and education).

### Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>age</th>
<th>gender</th>
<th>education</th>
<th>income</th>
<th>buyb_mean</th>
<th>bcon_mean</th>
<th>uad_mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>N valid</td>
<td>200</td>
<td>200</td>
<td>200</td>
<td>200</td>
<td>200</td>
<td>200</td>
<td>200</td>
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<tr>
<td>Missing</td>
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<td>0</td>
<td>0</td>
<td>0</td>
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<td>0</td>
</tr>
<tr>
<td>Mean</td>
<td>2.50</td>
<td>.41</td>
<td>3.39</td>
<td>3.51</td>
<td>3.3250</td>
<td>3.3775</td>
<td>2.9000</td>
</tr>
<tr>
<td>Median</td>
<td>2.00</td>
<td>.00</td>
<td>3.00</td>
<td>3.00</td>
<td>3.3750</td>
<td>3.5000</td>
<td>2.8333</td>
</tr>
<tr>
<td>Mode</td>
<td>2</td>
<td>0</td>
<td>3</td>
<td>3</td>
<td>3.50</td>
<td>3.50</td>
<td>2.67</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>1.012</td>
<td>.492</td>
<td>.692</td>
<td>1.500</td>
<td>.52736</td>
<td>.60854</td>
<td>.59380</td>
</tr>
<tr>
<td>Range</td>
<td>4</td>
<td>1</td>
<td>4</td>
<td>5</td>
<td>3.50</td>
<td>3.67</td>
<td>3.17</td>
</tr>
<tr>
<td>Minimum</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1.50</td>
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<td>1.33</td>
</tr>
<tr>
<td>Maximum</td>
<td>5</td>
<td>1</td>
<td>5</td>
<td>6</td>
<td>5.00</td>
<td>5.00</td>
<td>4.50</td>
</tr>
</tbody>
</table>
The above table indicates that significance level is below 0.05 so we can conclude that the results of our study are significant. (p = .000)

**Interpretation**

The p-value of gender is 0.689 which is greater than 0.05, hence it is insignificance in nature. Beta value is -0.2, it is negative so, gender is negatively correlated with buying behaviour. It means that males are more associated with buying behaviour as compared to females. Males are coded as “0” and females are coded as “1”. Education is insignificant because its p-value is greater than 0.05. 0.406>0.05 and it is positively
correlated with buying behaviour because its beta value is positive. Age is insignificant and it is negatively correlated with buying behaviour. Its p-value is 0.178>0.05 and its beta value is negative. Income is insignificant in nature because its value is 0.538 which is greater than 0.05. It is positively correlated with buying behaviour because “B” value is .012. Brand consumption is significant. Hence H2 is accepted because the relationship between the buying behaviour and brand consumption is significant and positive so we can say that, “One-unit increase in brand consumption will lead to .661 units increase in consumer buying behaviour”. Beta value is positive so brand consumption is positively correlated to a dependent variable that is buying behaviour.

Unethical advertisement is insignificant because 0.196>0.05 even it is positively correlated with buying behaviour but it is insignificant in nature so, we can say that H1 is rejected because unethical advertisement has an insignificant relationship with consumer buying behaviour.

### Correlation Matrix

<table>
<thead>
<tr>
<th></th>
<th>buyb_mean</th>
<th>gender</th>
<th>education</th>
<th>age</th>
<th>income</th>
<th>bcon_mean</th>
<th>uad_mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>buyb_mean</td>
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<td>.042*</td>
<td>-.019</td>
<td>-.105</td>
<td>-.110</td>
<td>.766*</td>
<td>.119*</td>
</tr>
<tr>
<td>gender</td>
<td>.042*</td>
<td>1.000</td>
<td>-.135</td>
<td>-.197*</td>
<td>-.152</td>
<td>.057</td>
<td>.214</td>
</tr>
<tr>
<td>education</td>
<td>-.019</td>
<td>-.135</td>
<td>1.000</td>
<td>.226*</td>
<td>.221</td>
<td>-.052</td>
<td>-.203</td>
</tr>
<tr>
<td>age</td>
<td>-.105</td>
<td>-.197</td>
<td>.226</td>
<td>1.000</td>
<td>.526*</td>
<td>-.078</td>
<td>-.020</td>
</tr>
<tr>
<td>income</td>
<td>-.110</td>
<td>-.152</td>
<td>.221*</td>
<td>.526</td>
<td>1.000</td>
<td>-.139</td>
<td>-.171</td>
</tr>
<tr>
<td>bcon_mean</td>
<td>.766</td>
<td>.057*</td>
<td>-.052</td>
<td>-.078</td>
<td>-.139</td>
<td>1.000</td>
<td>.096</td>
</tr>
<tr>
<td>uad_mean</td>
<td>.119</td>
<td>.214*</td>
<td>-.203*</td>
<td>-.020</td>
<td>-.171</td>
<td>.096*</td>
<td>1.000</td>
</tr>
</tbody>
</table>
Interpretation

The buying behaviour which is our dependent variable is positively correlated with gender, brand consumption and unethical advertisement but negatively correlated with education, age and income. Brand consumption (independent variable) is positively correlated with buying behaviour, gender and unethical advertisement but negatively correlated with education, age and income. Unethical advertisement (independent variable) is positively correlated with buying behaviour, gender and brand consumption and negatively correlated with education, age and income.

<table>
<thead>
<tr>
<th>Variable name</th>
<th>Cronbach's alpha</th>
<th>N of item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buying Behavior</td>
<td>0.720</td>
<td>8</td>
</tr>
<tr>
<td>Brand Consumption</td>
<td>0.713</td>
<td>6</td>
</tr>
<tr>
<td>Unethical Advertisement</td>
<td>0.656</td>
<td>5</td>
</tr>
</tbody>
</table>

Reliability Statistics

Cronbach’s alpha is basically used to measure internal consistency and reliability of the scale. The high value of Cronbach alpha indicates that your scales are unidirectional. In the unethical advertisement, we had 6 items and our Cronbach’s alpha was 0.587. We have deleted our sixth item which was not very important towards our variable and improves our Cronbach’s alpha to 0. 656. The buying behaviour and brand consumption reliability are acceptable because its Cronbach’s alpha value is greater than 0.

Discussion

This research has been conducted by MS students of University of Central Punjab to explore the impact of unethical advertisement
Impact of Unethical Advertisement and Brand Consumption on Consumer Buying Behavior

and brand consumption on consumer buying behaviour. The independent variables are an unethical advertisement and brand consumption. Unethical advertisement factors include wrong claims about the product, deception about the product features and false advertisement, whereas brand consumption factor includes consuming products and then evaluating actual product performance with perceived product performance that company has created through advertisement or marketing product to the customers. The dependent variable is consumer buying behaviour.

The data has been collected from the consumers of McDonald’s. We used the primary source of data collection i.e. questionnaires, with the assurance of authenticity and reliability. The responses of the respondents are kept confidential.

Findings illustrate the frequencies and percentages of respondents’ gender, income, qualification and age. Moreover, the hypothesis of our research H1 i.e., “Consumer buying behaviour has a significant relationship with unethical advertisement” that is rejected because it has insignificant relation with consumer buying behaviour as McDonald’s has the strong brand image it has created a well established image in consumer’s mind. So, the brands who have created a strong brand image in the market. It is an unethical advertisement or wrong claims about the product will not affect the consumer buying behaviour until or unless deception in claims is of the huge level. H2 i.e., “Consumer buying behaviour has a significant relationship with brand consumption”, have been accepted. However, the last section of this research project contains recommendations that are based on our analysis and the conclusion of the overall project.
Conclusion

The main purpose of this research is to enhance our knowledge for understanding the factors that influence consumer buying behaviour. The factors that were found to be influencing consumer buying behaviour including post brand usage feedback, misleading information, deceptive claims, the strong brand image of well-established brands. Though, our research findings indicate that unethical advertisement of those brands who have a strong good image in consumer mind does not influence consumer buying behaviour. However, it depends upon on consumer after consuming certain product and its post usage feedback influence consumer buying behaviour.

Limitations

- We have conducted the research by considering only food industry in which we have considered one well-renowned brand McDonalds that is one main limitation different results and findings can be interpreted if any researcher considers this study and relationship by considering another industry type such as apparel, manufacturing industry, retail store and even in the context of online shopping.
- We gathered data from the main branches of McDonald’s of city Lahore for getting access to McDonald’s customers. Results can be variated if we gather data from the different cities of Pakistan where McDonald’s operates.
- This is a cross-sectional study design so there is a possibility that it’s finding will become obsolete after a certain time.
- We have distributed 275 questionnaires out of 200 are considered appropriate as it is the good sample size for running regression analysis but by taking more than 200
sample sizes can further increase the generalizability of the concept.

- Out of 200, female respondents were 81 (40.50%) of the total sample size and 119 (59.50%) were the male respondents of the total sample size.

Recommendations

- After working on the unethical advertisement and brand consumption that affect consumer buying behaviour, we come up with the important factor that is known as a brand image that also influences one’s own perception in perceiving any advertisement unethical.

- Our findings recommend that those brands who have a strong brand image in the consumer mind will not influence the consumption pattern of the consumer so we recommend that future research should consider a brand image with other influencing factors.

- The future researcher should consider the ethical code of conduct in making ads to save their self from the deceptive claims.

- The future researcher should study this concept by considering another industry type such as the apparel industry, manufacturing industry and even study this concept in the context of online shopping that will help the researcher to uncover new aspects.
References


Leon G. Schiffman, Leslie Lazar Kanuk Prentice Hall, 2000-Business & Economics


Debbie Treise, Michael F. Weigold, Jenneane Conna & Heather Garrison Pages 59-69 | Published online: 03 Jun 2013


Respected Sir/Madam,

We are MS students in University of Central Punjab and our purpose of research is to measure impact of unethical advertisement and brand consumption on consumer buying behaviour. ensure you that any information obtained in connection with this study. In any written report or publication, no one will be identified and only aggregate data will be presented. There are no “trick” questions, so please answer each item as frankly and as honestly as possible. It is important that all the questions be answered. Once again thank you for your cooperation.

Gender: Female

Education: Metric or less ( ) Intermediate( ) Bachelor( ) Masters( ) PhD( )

Age: less than 20 years ( ) 21-30 years( ) 31-40 years( ) 41-50 years( ) above50 years( )

Income: less than 15K( ) 15-30K( ) 31-50K( ) 51-65K ( ) 66-80K ( ) above 80K( )

Unethical advertisement:

Directions: Read each item carefully. Using the scale shown below, please select the number that best describes you and put that number.

(1) Strongly Disagree (2) Disagree (3) Neutral (4) Agree (5) Strongly Agree
1. McDonald’s advertising shows an accurate view of reality
2. McDonald’s food is hygienic that they claim in their ads
3. McDonalds has taken away the leadership from parents in deciding what their kids are going to eat as they are directly advertising to kids
4. The food they advertise in their ads is exactly seem similar in reality
5. McDonalds promote the consumption of junk food in their ads by hiding its hazardous effect on health

<table>
<thead>
<tr>
<th>Item</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. McDonald’s advertising shows an accurate view of reality</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>2. McDonald’s food is hygienic that they claim in their ads</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>3. McDonalds has taken away the leadership from parents in deciding what their kids are going to eat as they are directly advertising to kids</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>4. The food they advertise in their ads is exactly seem similar in reality</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>5. McDonalds promote the consumption of junk food in their ads by hiding its hazardous effect on health</td>
<td>1 2 3 4 5</td>
</tr>
</tbody>
</table>

**Brand consumption:**

**Directions:** Read each item carefully. Using the scale shown below, please select the number that best describes you and put that number.

**(1) Strongly Disagree (2) Disagree (3) Neutral (4) Agree (5) Strongly Agree**

<table>
<thead>
<tr>
<th>Item</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. You eat McDonalds because you consider it well renowned brand</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>2. McDonalds has got success in meeting their customer desire needs</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>3. McDonalds provide adequate nutritional information on packaging of each item</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>4. McDonalds food is high in calories that makes you and your kid obese</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>5. Kids prefer to go to the McDonald as compare to other fast food restaurants</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>6. Do you like to eat at McDonalds because you consider it family place?</td>
<td>1 2 3 4 5</td>
</tr>
</tbody>
</table>
**Buying behaviour:**

**Directions:** Read each item carefully. Using the scale shown below, please select the number that best describes you and put that number.

<table>
<thead>
<tr>
<th>1. Are you a loyal customer of McDonalds?</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. You perceive that food at McDonalds does not give you value for the money</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. Do you believe repetition of certain ad influences the frequency of purchase</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. Will you trust McDonalds again after not meeting your desire expectations?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. You prefer to go to McDonald's just because it is a fun place</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. You go to McDonalds because you believe that it charges fair prices as compare to other brands.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. You eat at McDonalds because you perceive it provides you quality food.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. Will you like to switch your brand preference (McDonalds) if you get some promotional scheme with another brand?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

“Thank you for giving your precious time to fill this questionnaire”
Analysis of Relationship Between Income Inequality, Households’ Education and Health Expenditures

Pınar KOÇ

Abstract

The purpose of this paper is to analyze the relationship between income inequality, households’s education and health expenditures for NUTS 2. This study covers the 2014-2017 periods. It was used dynamic panel data based on GMM estimator in this study. The dependent variable of the model is the Gini coefficient. Independent variables of the model are the share of education expenditure to total consumption expenditures and the share of health expenditure to total consumption expenditures. In this study, descriptive statistics of the variables and correlation relationships between variables were primarily analyzed both at the throughout the country and regional level. There is a positive correlation between the Gini coefficient and education expenditures in countrywide. But there is no statistically significant correlation between Gini coefficient and health expenditures.

Results of dynamic panel data show that there is no statistically significant relationship between income inequality, households’ education and health expenditure. In other words, education expenditure and health expenditure at the meso-level don’t affect income inequality. After all, the increase in income inequality of previous period rises income inequality of the current period by 2.02 unit.

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**Keywords:** Dynamic Panel Data, Education Expenditure, Health Expenditure, Income Inequality.

**JEL Codes:** I14, I15, I24, C26

**Introduction**

The qualified human capital stock is one of the most important determinants of the national income level. Expenditures for the acquisition of knowledge and skills that make up human capital are kind of investment expenditure and people postpone their current consumption to make more consumption in the future. Each factor that will help to develop individual qualifications is also the determinant of human capital stock. In this context, education and health are the main reference point for human capital. Education and health, unlike physical capital, increase the productivity of other production factors used in the production process and also mediate the invention and rational use of new technologies. Therefore, resource allocative efficiency increase and the country’s economy can develop faster. Although the in terms of the importance of the knowledge and skills that make up human capital and education and health investments were discussed by many economists such as William Petty, Adam Smith, Simon Kuznets and Milton Friedman, the development of the human capital theory was found in the 1960s. The most important reason of this situation is that although the importance of labour and specialization is mentioned in the classical theory, the labour force participating in the production process is considered homogenous and it is accepted that there are no quality differences between the workers. Denison (1962), Schultz (1961) ve Becker (1964) developed the theory of human capital by benefitting from Adam Smith’s opinions. Grosmann (1999) was the first economist to treat health stock separately from human capital. According to Grossman (1999), while human
capital is a factor that increases individual productivity, health stock affects an individual’s income, consumption and leisure preferences.

The level of education and health significantly affects labour force participation rates and labour productivity. Inequalities in the low-income countries stem from low health and education expenditures, high unemployment rates, inadequate transport and technological infrastructure. Kuznets (1955) claims that low income and high-income inequality trap can be escaped by increasing health expenditures and education expenditures. According to Psacharapoulos-Woodhall (1985), how educational investments will affect economic efficiency depends on graduates having the expected income and employment in areas appropriate to their skills. Katz (1998) maintains that the effect of human capital investment on income distribution relies on the chosen profession and the level of education of the parents.

**Literature Review**

There are many studies examining the relationship between health status, health and education expenditures in the literature. Baird (2008) discussed that effect of private health care expenditure on governments’ redistributive effort. Baird (2008) concluded that governments should review the forms of financing health care while formulating income redistributive policies.

Garg and Karan (2009) explored whether reductions in out of pocket payments would decrease poverty. According to the results of the study, the increase in poverty due to out-of-pocket payment is 3.2%.

Bhattacharjee et al. (2017) examined the effect of public and private health expenditures on income inequality. Results
showed that an increase in private health expenditure can result in higher income inequality.

Ray and Linden (2018) concluded that in low-income countries, low income-high income inequality trap can be suppressing by rising health expenditures.

Christopher et al. (2018) examined the effect of households’ medical expenditures on income inequality in the USA. According to the results obtained, an increase in medical expenditure rises income inequality.

There are also study examining education and income inequality between relationship. Sylwester (2002) suggests that education expenditure can be used to reduce income inequality.


Sarwar et al. (2016) tested the existence of a U-shaped relationship between investment in education and income inequality for Pakistan. The results obtained confirmed the validity of the U-shaped relationship between investment in education and income inequality.

Salgado-Vega et al. (2016) concluded that there is a positive relationship between education expenditure for higher education and the income inequality for Mexico.

Çelikay and Şengül (2016) investigated the relationship between education expenditure and income inequality for 31 European countries. According to obtained results, while increases in education expenditures raise the income inequality in the short term, decreases in the long term.

Artige and Cavenaile (2017) discussed the impact of public education expenditure on economic growth and income inequality for 8 OECD countries. Findings show that there is
a U-shaped relationship between public education expenditure and income inequality.

Jianu (2018) examined whether government education and health expenditure affect income inequality. According to the results obtained, increases in government education expenditures leads to reducing income inequality.

The number of study examining the relationship between education expenditures and the income inequality for Turkey is limited. Köse and Güven (2007) concluded that increases education expenditures reduce income inequality in Turkey. Mercan and Sezer (2014) were found education expenditures in Turkey effect on economic growth positively. Ulusoy et al. (2015) expenditures for higher education has a negative effect on income inequality.

There is no study testing the relationship between health expenditures and income inequality. In this study, the effect of households’ education and health expenditures on income inequality in Turkey was analyzed at the regional level.

Methodology and Data Set

In this study, the effect of households’ education and health expenditures on income inequality in Turkey was analyzed for NUTS 2 level. The study covers the period of 2014-2017. In this study, It was used dynamic panel data based on GMM estimator.

Table 1. The Variables Used in The Model

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Independent Variables</th>
<th>Notation</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gini Coefficient (g)</td>
<td>The share of education expenditures to households’ total consumption expenditures</td>
<td>EDU</td>
<td>Turkish Statistical Institute</td>
</tr>
<tr>
<td></td>
<td>The share of health expenditures to households’ total consumption expenditures</td>
<td>HEALTH</td>
<td></td>
</tr>
</tbody>
</table>


The dependent variable of the model is income inequality. Independent variables of the model are education expenditure and health expenditure. Data set was obtained from the Turkish Statistical Institute Database. Dynamic panel data was used in this study. The model was estimated by using the System GMM estimators developed by Blundell and Bond (1998).

**Dynamic Panel Data Model Based on The System GMM Estimator**

The model based on the autoregressive panel data equation below;

\[ y_{it} = \alpha y_{i,t-1} + \beta_1 x_{it} + \beta_2 x_{it-1} + \eta_i + v_{it} \]  

for \( i = 1, 2, \ldots, N \) and \( t = 2, \ldots, T \) \( u_{it} \equiv \eta_i + v_{it} \) is the usual fixed effects’ decomposition of the error term; \( N \) is large and \( T \) is fixed in addition to \(|\alpha| < 1\). The has the corresponding common factor restricted \( \beta_2 = -\alpha \beta_1 \) form

\[ y_{it} = \beta_1 x_{it} + f_i + \xi_{it} \]  

with

\[ \xi_{it} = \alpha \xi_{i,t-1} + v_{it} \quad \eta_i = (1 - \alpha) f_i \]  

and

\[ y_{it} = \alpha y_{i,t-1} + \eta_i + v_{it} \quad \text{for} \quad i = 1, 2, \ldots, N \quad \text{and} \quad t = 2, \ldots, T \]  

It is assumed that \( \eta_i \) and \( v_{it} \) are independently distributed across \( i \) and have the familiar error components structure in which ;

\[ E(\eta_i) = 0, E(v_{it}) = 0, E(v_{it} \eta_i) = 0 \quad \text{for} \quad i = 1, 2, \ldots, N \quad \text{and} \quad t = 2, \ldots, T. \]  

\[ E(v_{it} v_{is}) = 0 \quad \text{for} \quad i = 1, 2 \ldots N, \forall i \neq s \quad \text{and} \quad E(y_{i,t} v_{it}) = 0 \quad \text{for} \quad i = 1, 2, \ldots N \quad \text{and} \quad t = 2, \ldots, T. \]

Conditions (5) and (6) imply moment restrictions that are sufficient to indentify and estimate \( \alpha \) for \( T \geq 3 \).

**Econometric Estimation**

Descriptive statistics of variables were examined before estimation results. Descriptive statistics of the variables are given table 2 and table 3 both at Turkey and regional level.
Table 2. Descriptive Statistics of Gini Coefficient, Education and Health Expenditures in Turkey

<table>
<thead>
<tr>
<th>Descriptive Statistics</th>
<th>g</th>
<th>Edu</th>
<th>Health</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mean</strong></td>
<td>0.354</td>
<td>1.741</td>
<td>1.873</td>
</tr>
<tr>
<td><strong>Median</strong></td>
<td>0.355</td>
<td>1.700</td>
<td>1.850</td>
</tr>
<tr>
<td><strong>Maximum</strong></td>
<td>0.443</td>
<td>3.400</td>
<td>2.700</td>
</tr>
<tr>
<td><strong>Minimum</strong></td>
<td>0.290</td>
<td>0.600</td>
<td>0.900</td>
</tr>
<tr>
<td><strong>Standard Deviation</strong></td>
<td>0.031</td>
<td>0.661</td>
<td>0.378</td>
</tr>
<tr>
<td><strong>Skewness</strong></td>
<td>0.246</td>
<td>0.656</td>
<td>-0.095</td>
</tr>
<tr>
<td><strong>Kurtosis</strong></td>
<td>2.543</td>
<td>3.420</td>
<td>2.828</td>
</tr>
<tr>
<td><strong>Jarque Bera</strong></td>
<td>1.956</td>
<td>8.238</td>
<td>0.284</td>
</tr>
<tr>
<td><strong>Probability</strong></td>
<td>0.375</td>
<td>0.016</td>
<td>0.867</td>
</tr>
<tr>
<td><strong>Sum</strong></td>
<td>36.892</td>
<td>181.100</td>
<td>194.800</td>
</tr>
<tr>
<td><strong>Sum Square Deviation</strong></td>
<td>0.100</td>
<td>45.012</td>
<td>14.784</td>
</tr>
<tr>
<td><strong>Observation</strong></td>
<td>104</td>
<td>104</td>
<td>104</td>
</tr>
</tbody>
</table>

Turkey’s Gini Coefficient is average 0.354 for the period of 2014-2017. Turkey is one of the countries with the highest income inequality. According to the Turkish Statistical Institute, the share of the 20 per cent group with the highest income from total income was 47.6 per cent while the share of the 20 per cent group with the lowest income was 6.1 per cent. According to the functional distribution of income statistics, salary and wage income had the largest disposable income. The share of salary and wage income in disposable income is 48.5 per cent. Provincial social income transfers and entrepreneur incomes follow salary and wage incomes (TSI, 2018). However, there is a 1.25-fold difference between the region with the highest income distribution and the region with the lowest income distribution.

According to the results of 2017 household budget survey, housing and rent had the highest expenditures share in total consumption expenditures with a rate of 24.7 per cent. The housing and rent expenditures follow the expenditures on food and non-alcoholic. Health expenditures and education
expenditures had the lowest shares in total consumption expenditures. When the expenditure statistics are analyzed, it is seen that the share of education expenditures in total consumption expenditures is average 1.74 and the share of health expenditures is average 1.87 for the period of 2014-2017.

While there is about the 6-fold difference between the region with the highest education expenditures and the region with the lowest education expenditures, this difference for health expenditures is three times.

Table 3. Descriptive Statistics of Gini Coefficient, Education and Health Expenditures at the Regional Level

<table>
<thead>
<tr>
<th>Code</th>
<th>Region</th>
<th>g</th>
<th>EDU</th>
<th>HEALTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>TR10</td>
<td>İstanbul</td>
<td>0.405 0.031</td>
<td>3.275 0.0095</td>
<td>2.375 0.050</td>
</tr>
<tr>
<td>TR21</td>
<td>Tekirdağ, Edirne, Kırklareli</td>
<td>0.340 0.027</td>
<td>1.625 0.250</td>
<td>1.925 0.150</td>
</tr>
<tr>
<td>TR22</td>
<td>Balıkesir, Çanakkale</td>
<td>0.360 0.008</td>
<td>0.875 0.221</td>
<td>2.150 0.479</td>
</tr>
<tr>
<td>TR31</td>
<td>İzmir</td>
<td>0.384 0.002</td>
<td>2.550 0.341</td>
<td>2.100 0.141</td>
</tr>
<tr>
<td>TR32</td>
<td>Aydın, Denizli, Muğla</td>
<td>0.319 0.002</td>
<td>1.925 0.170</td>
<td>2.225 0.095</td>
</tr>
<tr>
<td>TR33</td>
<td>Manisa, Afyon, Kütahya, Uşak</td>
<td>0.343 0.009</td>
<td>1.750 0.238</td>
<td>2.050 0.208</td>
</tr>
<tr>
<td>TR41</td>
<td>Bursa, Eskişehir, Bilecik</td>
<td>0.347 0.005</td>
<td>2.100 0.200</td>
<td>1.975 0.050</td>
</tr>
<tr>
<td>TR42</td>
<td>Kocaeli, Sakarya, Düzce, Bolu, Yalova</td>
<td>0.323 0.008</td>
<td>2.025 0.095</td>
<td>1.950 0.173</td>
</tr>
<tr>
<td>TR51</td>
<td>Ankara</td>
<td>0.384 0.009</td>
<td>3.325 0.050</td>
<td>1.750 0.100</td>
</tr>
<tr>
<td>TR52</td>
<td>Konya, Karaman</td>
<td>0.358 0.016</td>
<td>1.725 0.275</td>
<td>1.875 0.095</td>
</tr>
<tr>
<td>TR61</td>
<td>Antalya, Isparta, Burdur</td>
<td>0.370 0.014</td>
<td>1.900 0.216</td>
<td>2.575 0.050</td>
</tr>
<tr>
<td>TR62</td>
<td>Adana, Mersin</td>
<td>0.395 0.014</td>
<td>1.875 0.309</td>
<td>2.150 0.310</td>
</tr>
<tr>
<td>TR63</td>
<td>Hatay, Kahramanmaras, Osmaniye</td>
<td>0.377 0.007</td>
<td>1.725 0.095</td>
<td>1.675 0.095</td>
</tr>
</tbody>
</table>
According to Table 3, while the region has the highest income inequality is TR10 (İstanbul), the region has the lowest income inequality is TR81 (Zonguldak, Karabük, Bartın). When is examined, it is seen that the region has the highest education expenditures is TR51 (Ankara) with a rate of an average of 3.32 per cent. TR10 (İstanbul) follows TR51 (Ankara) with a rate of average 3.27 per cent. The region has the lowest education expenditures TRB2 (Van, Muş, Bitlis, Hakkari). The share of education expenditures in total consumption expenditures is average 0.77 per cent. In addition to, TR61 (Antalya, Isparta,
Burdur) is the region has the highest health expenditures with a rate of average 2.57. The region has the lowest health expenditures is TRB1 (Malatya, Elazığ, Bingöl, Tunceli).

Table 4. Analysis of Correlation Relationships Between Income Inequality, Education and Health Expenditures

<table>
<thead>
<tr>
<th>Variables</th>
<th>g</th>
<th>Edu</th>
<th>Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>G</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Edu</td>
<td>0.24</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.0132)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health</td>
<td>0.08</td>
<td>0.24</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>(0.3951)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.0133)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The correlation coefficients of the variables are in table 4. When is examined table 4, it is seen that there is positive correlation between gini coefficient and education expenditures. But, there is not statistically significant a relationship correlation between gini coefficient and health education.

Table 5. Analysis of Correlation Relationships Between Income Inequality, Education and Health Expenditure at the Regional Level

Dependent Variable: Gini Coefficient

<table>
<thead>
<tr>
<th>Code</th>
<th>Region</th>
<th>EDU</th>
<th>p</th>
<th>HEALTH</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>TR10</td>
<td>İstanbul</td>
<td>0.59</td>
<td>0.4071</td>
<td>0.79</td>
<td>0.2010</td>
</tr>
<tr>
<td>TR21</td>
<td>Tekirdağ, Edirne, Kırklareli</td>
<td>-0.94</td>
<td>0.0525***</td>
<td>0.95</td>
<td>0.0476*</td>
</tr>
<tr>
<td>TR22</td>
<td>Balıkesir, Çanakkale</td>
<td>-0.85</td>
<td>0.1418</td>
<td>-0.42</td>
<td>0.5727</td>
</tr>
<tr>
<td>TR31</td>
<td>İzmir</td>
<td>0.89</td>
<td>0.1093</td>
<td>0.79</td>
<td>0.2074</td>
</tr>
<tr>
<td>TR32</td>
<td>Aydın, Denizli, Muğla</td>
<td>-0.51</td>
<td>0.4861</td>
<td>-0.03</td>
<td>0.9684</td>
</tr>
<tr>
<td>TR33</td>
<td>Manisa, Afyon, Kütahya, Uşak</td>
<td>0.90</td>
<td>0.0916***</td>
<td>-0.58</td>
<td>0.4157</td>
</tr>
</tbody>
</table>
Table 5 shows correlation relationships between income inequality, education and health expenditure at the regional level. It is seen that there is positive correlation between income inequality and education expenditures in TR33 (Manisa, Afyon, Bursa, Eskişehir, Bilecik) and negative correlation in TR42 (Kocaeli, Sakarya, Düzce, Bolu, Yalova) and TR71 (Kirikkale, Aksaray, Niğde, Nevşehir, Kirşehir).
Kütahya, Uşak) and TR52 (Konya, Karaman) regions. But, there is negative correlation between income inequality and education expenditures in TR21 (Tekirdağ, Edirne, Kırklareli) region.

In addition to, there is positive correlation income inequality and health expenditures TR21 (Tekirdağ, Edirne, Kırklareli), TR42 (Kocaeli, Sakarya, Düzce, Bolu, Yalova) and TRC2 (Şanlıurfa, Diyarbakır) while there is negative correlation in TR71 (Kırıkkale, Aksaray, Niğde, Nevşehir, Kırşehir). TR21 (Tekirdağ, Edirne, Kırklareli) and economic structures of TR42 (Kocaeli, Sakarya, Bolu, Düzce, Yalova) regions are similar. When is examined sectoral distribution of employment, it is seen that the rate of those employed in agriculture, industry and services sectors; 16.7, 35.4 and 48.1 respectively in TR21 region. However, the unemployment rate is 7.5’tir. The rate of those employed in agriculture, industry and services sectors; 15, 35.8 and 49.2 respectively in TR42 region. But, TRC2 (Şanlıurfa, Diyarbakır) region is different from other regions in terms of economic structure. The fact that they have similar characteristics in terms of income inequality and health expenditures.

In a similar way, TR33 (Manisa, Afyon, Kütahya, Uşak) and TR52 (Konya, Karaman) regions where there is is positive correlation between income inequality and education expenditures have also common features in terms of the economic structure. In TR33 region, the rate of those employed in agriculture, industry and services sectors; 30.7, 27.7 and 41.6 respectively and unemployment rate is 6.7. In TR52 (Konya, Karaman) region, the rate of those employed in agriculture, industry and services sectors; 25.9, 28.9 and 45.3 respectively and unemployment rate is 5.9.
Table 6. Dynamic Panel Regression

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>z</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>$g_{t-1}$</td>
<td>2.022</td>
<td>1.162</td>
<td>1.74</td>
<td>0.092</td>
</tr>
<tr>
<td>Edu</td>
<td>0.372</td>
<td>0.536</td>
<td>0.69</td>
<td>0.498</td>
</tr>
<tr>
<td>Health</td>
<td>-0.141</td>
<td>0.162</td>
<td>0.87</td>
<td>0.381</td>
</tr>
</tbody>
</table>

Results of dynamic panel regression are in table 6. According to the results obtained, previous period gini coefficient affects on current gini coefficient. But, education expenditures and health expenditures aren’t statistically significant. In this context, it can be said that education and health expenditures don’t effect on income inequality.

Table 7. Testing of the Validity of Instrumental Variables and Autocorrelation

<table>
<thead>
<tr>
<th>Test</th>
<th>Test Statistics</th>
<th>Prob.</th>
<th>$H_0$ Hypothesis</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sargan Test</td>
<td>1.11</td>
<td>0.574</td>
<td>Instrumental Variables are valid</td>
<td>$H_0$ cannot be rejected</td>
</tr>
<tr>
<td>AR(1)</td>
<td>-2.145</td>
<td>0.0017</td>
<td>There is no first-order autocorrelation</td>
<td>$H_0$ can be rejected.</td>
</tr>
<tr>
<td>AR(2)</td>
<td>-1.27</td>
<td>0.204</td>
<td>There is no second-order autocorrelation</td>
<td>$H_0$ cannot be rejected</td>
</tr>
</tbody>
</table>

Sargan and autocorrelation test have been applied to test the validity of instrumental variables and autocorrelation. Results of estimation are table 7. According to table 7, instrumental variables are valid and there is no autocorrelation problem in the model.

Conclusion

Qualified human capital stock is one of the most important determinants of the national income level. Expenditures for the acquisition of knowledge and skills that make up human capital are kind of investment expenditure and people postpone their current consumption to make more consumption in the future. Each factor that will help to develop individual
qualifications is also the determinant of human capital stock. In this context, education and health are main reference point for human capital. Therefore, the size of the share allocated for education and health expenditures is important in eliminating inequalities. In this study, the effect of education and health expenditures on income inequality was analyzed for NUTS 2 level and the 2014-2017 period.

According to results obtained, Gini Coefficient of Turkey is average 0.354 for period of 2014-2017. Turkey is one of the countries with the highest income inequality. According to Turkish Statistical Institute, the share of the 20 percent group with the highest income from total income was 47.6 percent while the share of the 20 percent group with the lowest income was 6.1 percent. According to functional distribution of income statistics, salary and wage income had the largest disposable income. The share of salary and wage income in disposable income is 48.5 percent. Provincial social income transfers and entrepreneur incomes follow salary and wage incomes (TSI, 2018). However, there is a 1.25-fold difference between the region with the highest income distribution and the region with the lowest income distribution.

According to the results of 2017 household budget survey, housing and rent had the highest expenditures share in total consumption expenditures with a rate of 24.7 percent. The housing and rent expenditures follow the expenditures on food and non-alcoholic. Health expenditures and education expenditures had the lowest shares in total consumption expenditures. The share of education expenditures in total consumption expenditures is average 1.74 and the share of health expenditures is average 1.87 for the period of 2014-2017.

While there is about 6-fold difference between the region with the highest education expenditures and the region with the lowest education expenditures, this difference for health expenditures is three times.

The region has the highest income inequality is TR10 (İstanbul), the region has the lowest income inequality is TR81
The region with the highest education expenditures is TR51 (Ankara) with a rate of average 3.32 percent. TR10 (İstanbul) follows TR51 (Ankara) with a rate of average 3.27 percent. The region with the lowest education expenditures TRB2 (Van, Muş, Bitlis, Hakkari). The share of education expenditures in total consumption expenditures is average 0.77 percent. In addition to, TR61 (Antalya, Isparta, Burdur) is the region has the highest health expenditures with a rate of average 2.57. The region has the lowest health expenditures is TRB1 (Malatya, Elazığ, Bingöl, Tunceli).

There is positive correlation between income inequality and education expenditures in TR33 (Manisa, Afyon, Kütahya, Uşak) and TR52 (Konya, Karaman) regions. But, there is negative correlation between income inequality and education expenditures in TR21 (Tekirdağ, Edirne, Kırklareli) region.

In addition to, there is positive correlation income inequality and health expenditures TR21 (Tekirdağ, Edirne, Kırklareli), TR42 (Kocaeli, Sakarya, Düzce, Bolu, Yalova) and TRC2 (Şanlıurfa, Diyarbakır) while there is negative correlation in TR71 (Kırıkkale, Aksaray, Niğde, Nevşehir, Kırşehir).

The rate of those employed in agriculture, industry and services sectors; 16.7, 35.4 and 48.1 respectively in TR21 region. However, the unemployment rate is 7.5'ir. The rate of those employed in agriculture, industry and services sectors; 15, 35.8 and 49.2 respectively in TR42 region. In a similar way, in TR33 region, the rate of those employed in agriculture, industry and services sectors; 30.7, 27.7 and 41.6 respectively and unemployment rate is 6.7. In TR52 (Konya, Karaman) region, the rate of those employed in agriculture, industry and services sectors; 25.9, 28.9 and 45.3 respectively and unemployment rate is 5.9.

If the results are examined as a whole, it can be said that there is positive correlation income inequality between education and health expenditure in regions that their economic structures are similar.
References


Multi Criteria Decision Making Methods in Determining Medical Device Suppliers

Hakan Murat ARSLAN¹ & Elif YAĞCI²

Abstract

In recent studies especially in the health sector, it is emphasized that the choice of the supplier of medical devices and medical products with optimum characteristics is very important. This selection process must be based on scientific principals only by determining the most suitable supplier for the related company. Determining the optimum supplier problems can be solved by using Multi-Criteria Decision Making (MCDM) methods. The aim of this study is to demonstrate the utility of AHP and MOORA methods in the determination of the medical device supplier which will provide the optimum benefit for a healthcare company operating in technopark. While conducting the analyses, the managers of the related enterprises were accepted as decision-makers and the analyses were carried out with five criteria and five alternatives. Taking into account the structure of the related technopark member enterprise, the solution steps of the two different methods were applied separately and alternative suppliers were listed according to their priorities. As a result of the related calculations; at the first row (Firm B) and the second row (Firm D). The results of the analysis were shared with the relevant enterprise. Artificial intelligence optimization methods can be used in similar studies in the future.

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Keywords: Multi Criteria Decision Making Methods, AHP-MOORA Hybrid Method, Health Sector Businesses

JEL Codes: M11, C02, C51, C61

Introduction

Recently, under increasing competition, companies selling medical products continue their activities by introducing high quality and more functional products to the market. The majority of enterprises should develop positive inter-business relationships within the supply chain to maintain their current status and further expand their market share.

In this sense, enterprises have started to restructure their relations with their suppliers and customers according to the logic of mutual cooperation and value creation. Mutual positive partnerships with suppliers; improves product quality, reduces the costs of raw or semi-finished products, provides flexible production and most importantly increases customer satisfaction (Kapar, 2013).

The goal of all businesses is to make profit. For this purpose, enterprises have to plan their activities properly and efficiently. One of the most important subheadings of these planning activities is supplier selection and management.

Providing short term supply has been replaced by long-term relationships based on mutual trust. When carefully examined, supplier selection is a multidimensional and complex decision problem. It is important to evaluate the actual suppliers and determine the optimum suppliers for the companies. Considered carefully, relevant businesses do not have to work with more than one supplier. This condition helps to develop long-term partnerships. Long-term partnerships ensure low-cost and high-quality suppliers.
The actual traditional businesses that sell medical products operating in Turkey put up for sale the products they purchase from various regions of the world. Related products are purchased by patients with health problems. The fact that companies selling medical products supply these products from different distributors is directly effective in terms of costs. In order to minimize such cost expenses, some enterprises prefer Multi Criteria Decision Making (MCDM) methods in optimum supplier selection problems.

The most important problem in the companies that carry out their activities together with various supplier companies is that the products supplied from the supplier companies either do not arrive to the company on time or the incoming products are not in the desired quality and size. Solving this supply problem with the least loss is one of the important targets of companies which sell medical products (Sarıçiček et al., 2001).

Medical health products compose the majority of the procurement of the enterprise selling medical products. In this study, it has been examined whether the entity provides financial benefit if it uses the MCDM methods in determining the supplier of medical products.

Typically, a supplier selection problem consists of identifying potential suppliers, setting criteria, and selecting the most appropriate supplier among these alternatives. There are two important points here. First, criteria and weights must be determined for the assessment of suppliers. The second is the process by which other suppliers are ranked according to their suitability. In the first step, AHP method was used to determine criterion weights. In the second step, alternative suppliers which the relevant company can work have listed according to their priorities using the MOORA Method.
In the second part; studies on supplier selection, AHP and MOORA methods were expressed. In the third chapter, the methodology of the study is explained in detail. In the fourth chapter, the application steps are proclaimed. In the last section, the results of analysis, relevant evaluations and recommendations for future studies have been made.

**Literature Review**

**Supplier Selection Studies**

Proper identification of suppliers, one of the most important stages of the supply chain, is vital for businesses. Because a supplier selected by using scientific methods will make the enterprise more competitive in its sector (Özel & Özyörük, 2007). The selection of the most suitable supplier for the enterprise is a MCDM problem involving various verbal and numerical factors (Özdemir, 2010).

The first work on supplier selection was carried out by Dickson in 1966. In his study, a questionnaire with 23 criteria was applied and as a result it was determined that the most important criteria were the quality of the product, timely delivery and guarantee policy (Ecer and Küçük, 2008). Weber et al. analyzed 74 studies related to supplier selection between the (1966-1991) years and the most emphasized criteria; price, delivery time, and concluded that the product quality (Özel and Özyörük, 2007).

In the vast majority of studies in the literature, prominent criteria; product cost, product quality and delivery time (Öz & Baykoç, 2004).

In addition to these criteria, various criteria were found to be prominent. When recent studies are examined, criteria such
as product development, supplier manufacturing adequacy, financial position and product flexibility are used.

Some researchers (Akarte et al., 2001; Tam and Tummala, 2001; Ada et al., 2005; Soner and Önü, 2006; Özyörük and Özcan, 2008; Özdemir, 2010) used Analytical Hierarchy Process (AHP) method for the solution of supplier selection problems.

Dağdeviren et al. (2005) identified the criteria and criteria groups of the supplier selection problem and analyzed the model that emphasized the interrelation of the criteria with Analytical Network Process (ANP).

Min (1994) focused on verbal and quantitative criteria including risk and uncertainty factors in the selection of international suppliers. Subsequently, he selected the most suitable supplier by using the MAUT (Multi Attribute Utility Theory) method, which includes multi-functional utility theory.

Dagdeviren and Eraslan (2008) solved the problem of business which selects a supplier who wants to give the production of a newly designed semi-finished product to one of its suppliers according to certain criteria by PROMETHEE (Preference Ranking Organization Method for Encrichment Evaluation) method.

Karpak et al. (1999) solve the problem of supplier selection among 200 manufacturers producing original spare parts by using target programming (TP) method.

Liu et al. (2000) used the Data Envelopment Analysis (DEA) method, which takes into account the relative effects of alternatives with each other, in order to determine the optimal number of suppliers of an enterprise producing agricultural and construction by-products.

In the literature, hybrid methods are applied which use different methods in the same study. Among these, Dağdeviren and Eren (2001) first determined the weights of the criteria
with the AHP method, and then reached the conclusion with the analysis stages of the 0-1 TP method. Thus, they solved the optimum supplier selection problem of related enterprise.

It is found in the studies that supplier selection problems are solved by artificial intelligence optimization methods, expert systems and heuristic methods. Among these, Choy et al. (2002) conducted artificial neural network approach to compare the performances of suppliers and to determine the most appropriate one in the manufacturing sector. Öz and Baykoç (2004), on the other hand, designed a model that includes expert systems logic in order to provide decision support to the enterprise in the decision stage of the supplier selection problem.

There are also researchers in the literature who use fuzzy logic in supplier selection problems. For example, Güner and Mutlu (2005) and Luo et al. (2009) have analyzed the problem of supplier selection in two different sectors with Fuzzy AHP. Boran et al. (2009), they developed a solving model of supplier selection problem by combining fuzzy logic and VIKOR method and analyzed the variables.

Many businesses sell raw or semi-finished products from suppliers in their marketing activities. Depending on the properties of the product purchased from suppliers, the final seller should evaluate alternative suppliers based on the following characteristics: (Levary, 2008).

1. Existence of necessary technological infrastructure
2. Presence of talented workforce,
3. Consideration of the required quality standard,
4. Availability of necessary technical support,
5. Suggest an appropriate price,
6. Existence of information technology that will provide information flow between supplier and manufacturer,
7. Product flexibility,
8. Taking care to protect the registration information of the producer,
9. Presence of secure logistics Support

Katsikeas et al. (2004), among the criteria of the product supplied; reliability, competitive pricing, service support and technological innovation.

The reasonable price was generally effective in supply decisions. In general, the most important criterion in purchasing the product to be procured is considered to be the reasonable price. However, the minimum delivery time of products is also as important (Katsikeas et al., 2004).

An enterprise should pay attention to the following points when determining the most appropriate Supplier (Doğruer 2005: 402):
1. The price of the product,
2. The quality of the product,
3. Service provided by the supplier, (services such as barter, repair, training and like that)
4. Supplier’s address, (important for shipping time)
5. Supplier’s guarantee to supply the requested product,
6. Flexibility of the requested product (adaptation to sudden changes in demand)

Levary (2008) deals with an international business. This entity has appointed a consultant to select the supplier that will benefit him most from the two suppliers. It has given these consultants the task of determining the selection criteria. The consultants defined the selection criteria of the supplier as follows;
1. Supplier Reliability
2. Supplier Country Risk
3. Reliability of Logistics Companies

The weight of the criteria considered in determining the most appropriate supplier may vary by business or by product. Therefore, the weight of the selection criteria should be determined by considering the characteristics of each product or the structure of the service (Şenkayas et al., 2010).

Suppliers should be checked periodically. Because with this inspection production capacity, quality, size and product delivery time such features can keep under control (Doğruer, 2005: 403).

**Multi-Criteria Decision Making**

Multi-Criteria Decision Making (MCDM); It is expressed as the process of giving values to alternatives by evaluating many criteria together. Multi-criteria decision making approaches are multi-quality decision making and multi-purpose decision making. If the problem is based on evaluating alternatives and selecting the best by giving points to certain characteristics, such problems are called highly qualified decision-making problems.

Multi Criteria Decision Making is the method of choosing the best choice among multiple and simultaneous criteria. In a rational decision-making environment, the most preferred choice is often conducted for the purposes of constraints decision-makers. Multi-criteria decision making, In addition to its theoretical development it has shown a rapid development in the field of decision analysis in terms of its practical applications. It has a wide field of application that has established itself with
its success in decision making with a strong logic structure (Güneş and Umarusman, 2003; 243).

The MCDM represents both an approach and assists business executives who meet multiple and conflicting criteria in providing appropriate choices. MCDM methods are seen as the fastest developing branch of operations research in recent years. This is the approach that includes systematic, multidisciplinary and scientific approach elements in solving of decision problems which is the basis of this field (Çınar, 2004; 17-18).

The basis of MCDM methods is firstly determining the relevant criteria and alternatives, secondly determining the importance of alternatives according to the criteria and thirdly determining the ranking of each alternative (Mulliner et al., 2016). The main purpose of the MCDM problems is to identify the best alternative that provides the highest level of satisfaction in all relevant criteria (Chatterjee and Chakraborty, 2012; 385).

**Analytical Hierarchy Process (AHP) Method**

AHP Method uses a multi-level hierarchical structure of objectives, criteria, sub-criteria and alternatives. In this structure, the importance of each decision criterion is obtained through binary comparisons. Then performances of each alternative against each criterion is evaluated (Triantaphyllou, 1995).

This method was first studied by Saaty in 1986 and its application steps are given below (Kamal and Harbi, 2001);

1. The problem must be clearly defined and the aims of the problem are identified.

2. Criteria and alternatives must be put in a certain hierarchical order.
3. Comparisons between alternatives and criteria must be made using the scale expressed in Table 1. When the result of comparisons is expressed as a matrix, the binary comparison scale in Table 2 is used (Saaty, 1986).

4. To normalize the comparison matrix, column totals are found and each element of the matrix in that column is divided by the corresponding column total. Thus, the normalized matrix is obtained.

5. The line vector of the normalized matrix is obtained and the priority vector is obtained.

6. Each element of the matrix represented by the priority vector is multiplied by the predetermined criterion weights to produce a weighted normalized matrix.

7. The sum of the row values of the weighted matrix is divided by the line values of the priority vector matrix. Thus, the priority values of the alternatives are obtained.

8. When calculating the discrepancy index, firstly the CI value is found (Saaty, 1990). CI = (λ max-n)/(n – 1)

9. Consistency ratio can be calculated by using the randomness table values expressed in Table 1 and CI together (Saaty, 1980: 21).

**CR**: Consistency Indicator  **RI**: Stability Indicator

In the AHP method, the consistency indicator should be less than 0.1. If the value is greater than 0.1 the binary comparison matrix should be re-checked (Saaty, 1990).

### Table 1. Mean Random Stability (RI) Table (Saaty, 1980)

<table>
<thead>
<tr>
<th>N</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td>RI</td>
<td>0</td>
<td>0</td>
<td>0.58</td>
<td>0.9</td>
<td>1.12</td>
<td>1.24</td>
<td>1.32</td>
<td>1.41</td>
<td>1.45</td>
<td>1.49</td>
<td>1.51</td>
<td>1.48</td>
<td>1.56</td>
<td>1.57</td>
<td>1.59</td>
</tr>
</tbody>
</table>
### Table 2. Binary Benchmarking Scale (Saaty, 1986)

<table>
<thead>
<tr>
<th>Value</th>
<th>Description</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Equally Important</td>
<td>Acceptance of two comparisons being equal</td>
</tr>
<tr>
<td>3</td>
<td>Very little important</td>
<td>First one is slightly more preferable than the other</td>
</tr>
<tr>
<td>5</td>
<td>Strongly important</td>
<td>First one is much more preferable than the other</td>
</tr>
<tr>
<td>7</td>
<td>Extremely important</td>
<td>First one is very strongly preferred over the other</td>
</tr>
<tr>
<td>9</td>
<td>Absolutely important</td>
<td>First one is highly desirable over the other</td>
</tr>
<tr>
<td>2,4,6,8</td>
<td>Values between</td>
<td>Values between 1-3,3-5,5-7,7-9</td>
</tr>
</tbody>
</table>

**MOORA (The Multi Objective Optimization by Ratio Analysis Method)**

The MOORA method was first introduced as a whole in “Control and Cybernetics” by Willem Karek Brauers and Edmundas Kazimieras Zavadskas. The superior side of the method is that it takes into account all purposes. It even deals with all interactions that occur between alternatives and goals, not as part, but as a whole. It also uses objective values instead of subjective evaluations (Aksoy, Ömürbek, & Karaatlı, 2015).

The MULTIMOORA approach was first introduced by Brauers and Zavadskas in 2010 (Brauers and Zavadskas, 2010). This approach is not a stand-alone method. It is made evaluating the rankings made as a result of other MOORA methods according to their most recent dominance, provides a final assessment (Karaca, 2011).

Absolute dominance means that the same row is achieved in all alternative methods. General dominance is dominated by two of the three methods (Brauers and Zavadskas, 2011).
Methodology

Purpose of the Research

Nowadays, outsourcing for businesses is increasing rapidly. Especially in order to keep up with the intense competition conditions, the tendency to specialize in their fields has made outsourcing compulsory. Therefore; increasing the quality, gaining flexibility, decreasing the costs, adapting to the technology and staying in the competitive environment and so on increased the outsourcing rate. Outsourcing is a process that needs to be managed well. In this process, managers should first determine the need for suppliers and turn to the appropriate supplier selection in line with their needs. In order to make an effective decision in outsourcing activities, enterprises choose their suppliers considering many criteria. In this study, it is aimed to determine the most suitable supplier by using AHP and MOORA methods separately among five alternative suppliers of a medical company operating in Düzce Technopark. Two officials of this enterprise were designated as decision makers. The analyzes were carried out by taking into consideration the five determined criteria by the objective opinions of the decision makers.

Scope of Research

The suppliers that the medical enterprise needs are selected from the appropriate sector. The study was limited to medical products suppliers and was conducted in Düzce province. In addition, two different MCDM methods were applied in the selection of the most suitable supplier.
Determination of Criteria and Alternatives

The criteria that the decision makers deem appropriate and related to the sector to which the enterprise is affiliated are listed. These criteria were determined by objective evaluations by decision-makers. As an alternative, five suitable suppliers have been identified among the suppliers with whom the entity has previously worked.

Criteria:
- K1: Cost
- K2: Warranty Period
- K3: Communication Speed
- K4: Assortment
- K5: Lead Time

Alternatives:
- A1: Firm A
- A2: Firm B
- A3: Firm C
- A4: Firm D
- A5: Firm E

Research Model

In this study, the optimum supplier selection model is analyzed based on the evaluations of the decision makers chosen according to the structure of the problem. The analyzes were performed using AHP and MOORA methods. In the solution model of the problem; objectives, criteria and alternatives are expressed in a hierarchical structure. Criteria and alternatives were compared with the judgments of decision makers.

Application

In this study, weights of uncertainty criteria were determined by AHP method. In addition, alternatives were analyzed separately by both AHP and MOORA method and ranked according to their priorities.
Determination of Criterion Weights by AHP Method and Sorting Alternatives

Super Decisions program was used in AHP method. The final weight values of the criteria were obtained according to the judgments of the decision makers about the criteria. When the inconsistency value was examined in comparison of criteria, it was found to be less than 0.1. In Figure 1, the solution model of the problem is shown in a hierarchical structure.

![Figure 1. Determination of the Most Suitable Medical Supplier Model](image1.png)

The weight values of the criteria are indicated in Figure 2 below. The criterion with the largest weight value was cost.

![Figure 2. Weight Values of Criteria](image2.png)
After calculating the weights and inconsistency ratio of the criteria, the analysis steps of the AHP method were advanced one by one to obtain the final priority ranking of the alternatives. This ranking is given in Table 3.

Table 3. Final Ranking of Alternatives by AHP Method

<table>
<thead>
<tr>
<th>Result</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firma A</td>
<td>0.16</td>
</tr>
<tr>
<td>Firma B</td>
<td>0.26</td>
</tr>
<tr>
<td>Firma C</td>
<td>0.14</td>
</tr>
<tr>
<td>Firma D</td>
<td>0.24</td>
</tr>
<tr>
<td>Firma E</td>
<td>0.20</td>
</tr>
<tr>
<td>Total</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Table 3 was examined carefully; Firm B ranked first, Firm D ranked second, and Firm E ranked third.

Determination of the Most Suitable Medical Supplier by MOORA Method

There are stages of the MOORA method. When these steps are applied, ratio method, reference point approach, full product method and multi MOORA methods should be applied one by one. Otherwise, the result may not be sufficiently reliable. In the following titles, the solution steps of the MOORA method are explained in detail.

MOORA Ratio Method

In order to start the analysis in MOORA method, it is necessary to form the decision matrix first. The decision matrix for the relevant problem is given in Table 4.
Table 4. Decision Matrix

<table>
<thead>
<tr>
<th>Firm</th>
<th>Cost (TL)</th>
<th>Warranty Period (Year)</th>
<th>Communication Speed (Point)</th>
<th>Lead Time (Day)</th>
<th>Assortment (Piece)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>15.080</td>
<td>1</td>
<td>9</td>
<td>3</td>
<td>17</td>
</tr>
<tr>
<td>B</td>
<td>19.500</td>
<td>3</td>
<td>6</td>
<td>6</td>
<td>40</td>
</tr>
<tr>
<td>C</td>
<td>18.760</td>
<td>1</td>
<td>7</td>
<td>4</td>
<td>48</td>
</tr>
<tr>
<td>D</td>
<td>22.480</td>
<td>4</td>
<td>5</td>
<td>8</td>
<td>80</td>
</tr>
<tr>
<td>E</td>
<td>25.600</td>
<td>5</td>
<td>5</td>
<td>9</td>
<td>61</td>
</tr>
</tbody>
</table>

When the decision matrix is examined, it is seen that some data are not suitable for analysis. Therefore, the data becomes more comparable when normalized. The ranking of alternatives according to the ratio method after this procedure is given in Table 5.

Table 5. Ranking of Alternatives by Ratio Method

<table>
<thead>
<tr>
<th>Ratio Values of Alternatives</th>
<th>Ranking of Alternatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>0,357</td>
<td>3.</td>
</tr>
<tr>
<td>0,317</td>
<td>1.</td>
</tr>
<tr>
<td>0,330</td>
<td>2.</td>
</tr>
<tr>
<td>0,518</td>
<td>5.</td>
</tr>
<tr>
<td>0,360</td>
<td>4.</td>
</tr>
</tbody>
</table>

MOORA Reference Point Approach

In order to apply the reference point approach, the maximum and minimum values of each column are determined in the normalized matrix. Then, reference values are determined. These reference values can also be considered as reference points. In Table 6, these reference points are written in bold and dark.
Table 6. Reference Points for Alternatives

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>0.327</td>
<td>0.139</td>
<td>0.612</td>
<td>0.209</td>
<td>0.142</td>
</tr>
<tr>
<td>B</td>
<td>0.423</td>
<td>0.416</td>
<td>0.408</td>
<td>0.418</td>
<td>0.334</td>
</tr>
<tr>
<td>C</td>
<td>0.407</td>
<td>0.139</td>
<td>0.476</td>
<td>0.279</td>
<td>0.401</td>
</tr>
<tr>
<td>D</td>
<td>0.488</td>
<td>0.555</td>
<td>0.340</td>
<td>0.557</td>
<td>0.669</td>
</tr>
<tr>
<td>E</td>
<td>0.556</td>
<td>0.693</td>
<td>0.340</td>
<td>0.627</td>
<td>0.510</td>
</tr>
</tbody>
</table>

As a result of the evaluations carried out according to the proximity values of the reference points indicated in Table 6, alternatives are listed according to their priorities. This ranking is clearly stated in Table 7.

Table 7. Ranking of Alternatives by Reference Point Approach

<table>
<thead>
<tr>
<th>Firm</th>
<th>Maximum Values of Alternatives According to Reference Points</th>
<th>Ranking of Alternatives According to Reference Point Approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>0.555</td>
<td>4.</td>
</tr>
<tr>
<td>B</td>
<td>0.334</td>
<td>1.</td>
</tr>
<tr>
<td>C</td>
<td>0.555</td>
<td>4.</td>
</tr>
<tr>
<td>D</td>
<td>0.348</td>
<td>2.</td>
</tr>
<tr>
<td>E</td>
<td>0.418</td>
<td>3.</td>
</tr>
</tbody>
</table>

Moora Full Product Form

The exact product is also made with the data in the normalized matrix. When the maximum and minimum values in each row of the normalized matrix are multiplied and divided between them, the values obtained are ranked from big to small. This last ranking is the full product form ranking. The values from the full product form and ranking of alternatives indicated in Table 8.
Table 8. Ranking of Alternatives by Full Product Method

<table>
<thead>
<tr>
<th>Firm</th>
<th>Values of Alternatives in Full Product Form</th>
<th>Ranking of Alternatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firm A</td>
<td>0.171</td>
<td>5.</td>
</tr>
<tr>
<td>Firm B</td>
<td>0.312</td>
<td>4.</td>
</tr>
<tr>
<td>Firm C</td>
<td>0.454</td>
<td>1.</td>
</tr>
<tr>
<td>Firm D</td>
<td>0.451</td>
<td>2.</td>
</tr>
<tr>
<td>Firm E</td>
<td>0.345</td>
<td>3.</td>
</tr>
</tbody>
</table>

MULTIMOORA Approach

In the Multi MOORA approach, all rankings of alternatives obtained in the previous steps are compared. These rankings and the final ranking obtained as a result of the Multi MOORA approach are summarized in Table 9.

Table 9. Final Ranking of Alternatives According to Multi MOORA Approach

<table>
<thead>
<tr>
<th>Firm</th>
<th>RATIO METHODS</th>
<th>REFERENCE POINT</th>
<th>FULL PRODUCT</th>
<th>MULTI MOORA RANKING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firm A</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Firm B</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Firm C</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Firm D</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Firm E</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

Findings and Comments

The decision matrix stated in Table 4 was formed based on the data regarding the supplier selection problem of the enterprise where the application was made. Afterwards, the comparison matrix and consistency analysis of the mutual comparison of the criteria was performed by considering the
The analysis stages of AHP method. According to these results, the ranking of alternatives according to the AHP method was found (Table 3). Afterwards, the final ranking of the alternatives that ended with the Multi MOORA approach was found by considering the analysis stages based on the decision matrix within the scope of MOORA method (Table 9).

According to these findings, the ranking of alternatives according to AHP and MOORA methods;
1- Firm B
2- Firm D
3- Firm E

When these results are examined carefully, the first three rankings do not change as a result of the analyses realized by two different methods. According to these supporting results, it is expected that the medical product’s enterprise, where the application is made, will obtain positive results if it can manage the procurement process in the order of priority specified in the supplier selection.

Conclusion and Evaluation

The purpose of determining the most suitable supplier in the companies selling medical products is; increasing the efficiency of the enterprise, measuring the degree of achievement of the set targets, realizing and developing the planned programs. The enterprises evaluate the results of the supplier selection analysis and have information about the performances of their suppliers and make decisions in this direction. Performance-enhancing practices are performed with suppliers with low performance, and encouraging efforts are made to create a more successful supply chain with high-performance suppliers.
In this study, AHP and MOORA methods are evaluated separately to determine the performance of suppliers. The ranking of the five suppliers of an enterprise operating in Düzce Technopark operating according to their performance was determined by using MCDM methods.

When the analysis results of the study were examined; two separate MCDM methods were applied independently. It was seen that the same alternative ranking was obtained by both methods. According to the results that support each other; it would be appropriate to work with the suppliers of Firm B, Firm D, and Firm E in the first rank in the selection of the business supplier selling the relevant medical products.

The results of the study were presented to the managers of the related enterprise and it was found that there were differences between the results obtained and the existing system of the enterprise. However, it has been shown that the supplier problem of companies selling medical products can be solved by using MCDM methods.

In future studies, different criteria may be used to identify the suppliers of medical products enterprises. Evaluations can be made by using artificial intelligence optimization methods based on fuzzy logic from current approaches.
References


Globalisation Approaches Perspectives of Right-Wing Political Parties: An Exemplary Analysis of AKP and MHP

Dilşad TÜRKMENOĞLU KÖSE

Abstract

Globalization is one of the most important political and academic issues of recent years. The subject of the study is that it is seen that there is a constant mention in the field of social sciences; the impact of globalization has been identified as right-wing political parties in Turkey. Accordingly, this study aims to assess whether conformed or not with the global political system in the transformation process of right parties undergo or not after the 1980s with the globalization. In this study, a combination of qualitative and quantitative research methods (mixed method) was used in a study. Surveys were conducted with base staffs both these two parties in 14 cities and also interviews were carried out in the same direction with the management team. As a result, political parties that follow policies in accordance with the global political system and also with more linear policies with their base staff, come out as more successful.

Keywords: Globalization, Right Wings Party Politics, Political Parties, Party Policy, Justice and Development Party, Nationalist Movement Party.

JEL Code: P16

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Introduction

It could be said that beginning in 1980, the most commonly used word in Turkey and another part of the world is globalization. This is because globalization concerns every segment of society with its positive or negative aspects. The phenomenon of globalization is not only an intellectual discussion platform or an ideological renegotiation field, but it also possesses the characteristics of affecting, changing and transforming all aspect of life such as production, employment, income distribution, domestic and foreign trade, social security, public services, education and health. In addition to this classification, there are also some who say that globalization is a phenomenon, a stage that arises from the accumulation of historical developmental processes and it emerges spontaneously.

Parallel to the process of globalization, inequalities, risks and insecurities are frequently brought up, income injustice increases both within a country and between countries, and cultural flows are more one-sided, it has some negative consequences for social integration in many countries. Accordingly, the discussions about the globalization process are multi-dimensional and the approaches its discussions are made from different perspectives. The wide-range and multi-dimensional nature of the discussions of the globalization process make it difficult to put globalization-related approaches into one category. In the sense of experiencing difficulties of living, Anthony Giddens (2000) makes a dual distinction (that is the Pro-Globalization (radicals) and the sceptics of globalization). Thinkers such as David Held, Anthony McGrew, David Goldblatt and Jonathan Perraton (1999), Hugh MacKay (2000), Grahame Thompson (2000), Allan Cochrane and Kathy Pain (2000) generally considered and evaluated these approaches in three groups. The three different perspectives in the conceptualization of
globalization are Pro-Globalization (Radical) Approaches, Anti-Globalization Approaches (Sceptics) and Transformationalists. The perspectives of these three tendencies, which approach globalization from various perspectives, differ in many points.

The aim of the study to reveal the globalization approaches of AKP and MHP from the right-wing political parties of Turkey. In this regard, firstly theoretical frameworks of globalization approaches are discussed. Afterward, to reveal the globalization of the political parties of considerations, analyses of conducted surveys and interviews conducted discussed.

**Different Approaches to Globalization**

**Pro-Globalization Approaches (Radicals)**

In literature, those who have a pro-globalization approach are also referred to as radicals. Pro-globalization state that, globalization is completely real, and that its consequences can be felt throughout the world without relinquishing. Therefore, they believed that with the process of globalization, all human beings can be placed under one roof without different ties to citizenship and the hardships of great cultural differences. In this regard, there is the existence of a global civilization, where universal values and institutions are sitting in the basic predictions of the pro-globalization (Fox, 2002: 35). Among the claims of pro-globalization is that since the 1980s there have being a fast spread of the global market and that nations have lost a significant part of their former understanding of sovereignty.

According to the pro-globalization, the nation-state, which is a product of the post-industrial revolution and which has existed in the process of globalization, has lost its importance in the process of globalization, which makes itself felt more and
more by accelerating. In other words, the development of the
global market points to higher rationality in society; a decrease
in the importance of politics and politicians (Giddens, 1999:
56). In this sense, it can be said that pro-globalization claim
that, global society is replacing traditional nation-states and
that new forms of social organization are beginning to emerge.

It could be said that the most prominent among the thinkers
of pro-globalization are Kenichi Ohmae, Arjun Appadurai,
Walter Wriston, Jean Marie Guehenno, Michael Hardt and
Antonio Negri (Bülbü, 2009; 61-62; Şahin, 2009: 67). Despite
the consensus we have just discussed within the framework of
the pro-globalization approach, these approaches can also be
handled in different ways within the framework of ideological
differences.

Ohmae, for example, states that thanks to information and
communication technologies, it removes barriers to cross-
border participation and strategic alliances and facilitates
mobility. According to him, as a result of this mobility, the
traditional function of nation-states and their governments
is largely unnecessary (Ohmae, 2006: 269-272). Therefore,
from this neo-liberal point of view, globalization refers to a
process of globalization in which the world society replaces
the nation-state and the free market is realized more rationally
on a global scale without the intervention of the nation-state.

According to the pro-globalization approach, this process,
which continues to make its presence felt by accelerating and
intensifying, will be the winners as well as the losers, especially
in the economic field. On the one hand, ‘a new global division
of labor’ rises, on the other, governments must ‘manage’ the
social consequences of globalization. Globalization can connect
the polarization between the winner and the loser within
the global economic order (Bozkurt, 2005: 340; Çelik, 2012:
Even if the situation of certain groups in the economy is weaker than others at the end of global competition, almost all countries have a comparative advantage in the production of certain goods. For sceptics, such an optimistic approach is not correct. According to them, capitalism creates inequality both within and between nations.

**Anti-Globalization Approaches (Sceptics)**

Anti-globalization approaches are often referred to as “Sceptical Approaches in literature. This group, as Giddens (1999: 56) points out, is sceptical about globalization in all matters. Some members of this group consider the process of globalization as the new non-combatant logic of savage capitalism (Gerbier, 1999: 105).

According to proponents of the sceptical approach, globalization is not unexpected; only this process is exaggerated by extreme pro-globalization. Even the world economy seems to be less integrated than it was in the past. In the face of the globalization process, regionalization is not an intermediate station of globalization but an alternative to globalization. Within this framework, the sceptics, who state that they cause “inequality” in the world economy, emphasize the possibility of globalization not bringing about integration but the possibility of bringing new conflicts between different cultures or regions (Bozkurt, 2000: 21-22). In this direction, regionalization which is developed against the globalization process is not considered as a part of globalization, but rather as an alternative to globalization.

Names like Immanuel Wallerstein, Noam Chomsky, Samir Amin, Richard Falk and William K. Tabb are the leading thinkers of the sceptical approach. They insist that neo-liberal policies and practices do not lead to an increase in prosperity
at the universal level as alleged, but on the contrary, they encourage economic imbalance and increase the dependence of the south to the north in the international system and deepen income injustice at the national level (Şahin, 2009: 72). It can be concluded that the sceptical approach is also a critique of neo-liberalism, one of the fundamental dynamics of globalization. Within the framework of this approach, it is seen that the majority of those who express anti-globalization expressions and concerns are intellectuals in the left tandem (Coşkun, 2001: 71, Şahin, 2009: 76). This situation is evaluated as an anti-globalization approach is more accepted among the groups who cannot benefit from the opportunities provided by globalization.

**Transformationalists**

Those who have a transformational approach towards globalization are abstaining from making definite evaluations about globalization (Giddens, 1999: 56). According to the transformers, as a process that has not yet ended, globalization is experiencing a multi-dimensional transformation to the world.

Today, mutual economic relations are incomparable to previous periods. But more importantly, the economy is increasingly focusing on services. In fact, services including rapid developments in information and communication technologies are considered as the most important sector in the economy. This has caused the globalization process to become inevitable with all its dimensions. It is possible to say that the supporters of the transformational approach put forward their rhetoric over this inevitability. Transformationalists emphasize that the globalization process brings innovations in every aspect of life according to radicals and transformers.
They state that the globalization process is being restructured in accordance with the new global process as in many other institutions (McGrew, 1999: 62). In this context, they state that globalization is exaggerated politically, that nation-states continue to fulfill their vital functions and that this new reality called globalization is inevitable and should not be feared (Farazmand, 2001: 441). Regarding the globalization approach, it is possible to say that transformers are closer to those who are a party to globalization than to those who are against globalization.

As a result, it can be said that by looking at the conceptual and theoretical framework of the process called globalization; globalization is not a new process, it is an old concept whose dimensions are the whole world. The current usage difference of this concept is based on the collapse of the Eastern Block, the advancement of information technology in the light of technological developments, the elimination of trade barriers, the increase in the power and efficiency of multinational companies, the establishment of a free-market economy and the spread of the free market economy. The main source of the difference in the perspectives of the three different approaches to the globalization process can be based on the world views they represent and the extent to which they approach globalization rather than the phenomenon of globalization. Therefore, the views of the right-wing political parties (which are the main subject of this study) on the approach of globalization will be related to the ideological view they represent.

**Purpose of Field Research and Interview Studies**

Today, the field of politics can gain depth as a result of developing political consciousness in accordance with the social, economic and cultural positions of large masses through political
Globalisation Approaches: Perspectives of Right-Wing Political Parties

In creating such a situation, the political organizations (parties) that are sensitive to the global political system have great responsibilities by correctly evaluating the existing socio-economic structure. In this context, it can be said that many of the issues that are perceived as an internal problem today are related to global political processes. Therefore, the fact that political parties do not consider the effects of the global political system can be considered as a reason to block the way of producing solutions to social problems. In this study, political parties’ views on globalization approaches and their effects on party policies will be evaluated.

Research Method of Field Survey and Interview

Both qualitative and quantitative research methods were used in this work. In quantitative research, a questionnaire was chosen as a scientific research model of the data collection technique. The main reason the questionnaire was preferred was related to the aim of reaching many people in different provinces. A total of 1100 party members from both AKP and MHP participated in the field research.

A total of twelve personal information questions, which included three sets of open-ended questions, were included in the questionnaire to determine demographic characteristics. In addition, there were twenty-eight Likert scales expressions. These expressions were evaluated as “agree” criterion, with the average being 3, those below 3 were considered as 1 and 2 negatives (Strongly Disagree-Disagree), and those above 3 were evaluated as 4 and 5 positives (Strongly Agree-Agree). The data obtained were analyzed under three headings in line with the general problematic of the study. Among the qualitative research methods, the “structured interview” method was used. This study method is also called an “in-depth interview”.

Selection of Universal and Samples of Field and Interview Works

It is thought that there are points of divergence and reconciliation towards the globalization between the AKP (based on conservative democracy or which can be based on the right main wing) and the MHP (can be based on the nationalist conservative or right main wing) in Turkish political life based on the conducted survey and structured interview. The aim of the study is to determine the points of divergence and reconciliation as mentioned above. In addition, this study will provide an insight into the extent to which both parties’ approaches to globalization are successful or failure. In this context, the sample selection in the quantitative part of the study constitutes the headquarters of the AKP and MHP (Turkey the right-wing of the political party [exceeding the 10% threshold], which have the most percentage of votes) and party offices (Determined by considering the proportionality with the last period election percentages) in fourteen provinces. 2011 general election results of the right political parties represented in the parliament were considered in the determination of the provinces.

Limitations of Field and Interview Work

This study has four limitations. Firstly, the study is limited to the designated political parties. Secondly, the study is limited to the provinces determined according to objective criteria. Thirdly, the study is limited to the provincial and district office of the parties in the designated provinces. Finally, the data collection tools developed in the study are limited to statistical techniques, the sample itself and the date range of the study.
Data Analysis of Field and Interview Studies

Since the details of the structured interview study are given in detail in the above sections, the data used in this part of the study and the analysis techniques of these data will be elaborated. In this context, when the statistical techniques used in data analysis are examined, the questionnaire responses collected in the research were analyzed and interpreted by using “SPSS for Windows 20.0 (IBM)” program. Firstly, reliability, validity and internal consistency of the scales were determined. Frequency analysis, percentage slices and cross tables of demographic characteristics were performed. Afterward, the ANOVA test was performed according to lot distribution and arithmetic mean and standard deviations were taken. The effects of globalization and the problem areas they have created according to party disparities are examined separately graphically.

Perspectives of Party Leaders on Globalization Approaches

In the six questions included in the interview, the questions are aimed at putting forward the globalization approaches of the parties in general. Based on the answers given to the questions, it is possible to say that when we try to interpret the approaches of the party administration to globalization, both parties give consistent and consistent answers within the party program. AKP Deputy Chairman Hüseyin Çelik emphasizes that; there is nothing that globalization does not affect in this world. Furthermore, he explained that the instances of institutions that want to exclude themselves from the global political system with an example of silkworm cocoons: “If the silkworm is surrounded by its cocoon just to survive, independent of external factors, it cannot survive because
of external factors, disappear, or live longer than normal, but this time it disappears within itself and cannot take the opportunity to open up to the world.” In the light of the relevant example, Çelik points out that trying to stay out of globalization or not accepting it may cause a loss in any case. According to Çelik, who states that the process of globalization and societies are integrated with each other and that the world agenda and countries agenda are parallel, although there is a distinction between the countries that determine the agenda and the process of globalization and that there is a distinction between the process of globalization, it is always the same thing to accept being a affected country. Although it seems that Çelik has dealt with the negative aspects of globalization, it is possible to say that he has a view to gain maximum benefit from the inevitable process with the priority of evaluating opportunities. In this case, it is possible to say that Çelik has a pro-globalization approach, although he has criticized from time to time. According to Yasin Aktay, Deputy Chairman of the AKP, globalization is a new phase of the world and the whole world is portrayed as a small village in integration with each other. Aktay emphasized that it is impossible for the economic order and cultural values to be detached from the world, as well as this independent process, but this integrated seeming order can sometimes be very misleading. Aktay explained the situation with examples from Syria and Myanmar and states that although all kinds of massacres and human rights violations are being committed in some very small areas in the world, the whole world can remain an audience. According to Aktay, who said that with the globalization process, brand new dynamics are manifesting in the world, it is inevitable to be affected by these dynamics and maximum benefit can be obtained by integrating with the process and producing
policies appropriate for it. In this context, it is seen that Aktay’s approach to the globalization process is in line with Çelik’s globalization approach.

Deputy Chairman of the MHP Zuhal Topçu, who participated in the interview, states that with the development of communication and information technologies, all societies and institutions have an unlimited interaction with each other. The main factor of this interaction is to be aware of the information technologies thanks to the developing information technologies. At this point, Topçu, as Yasin Aktay mention in the above paragraph, it is not possible not to be affected by events somewhere away from your place. In addition to all these, Topçu, unlike Aktay, mentioned that the interaction with globalization is more unidirectional and should be bi-directional and reciprocal while criticizing the fact that what is seen today is the unilateral effect of the powerful on powerless. Therefore, as promised, the status of a common citizen’s common identity is not even the case for Topçu. There are good aspects of globalization as well as bad aspects that can go as far as extinction within the framework of the exploitation and integration of societies. According to Topçu, the basic condition for obtaining the optimum benefit from the globalization process, which has such negative sides and clear threats and dangers for societies, is to analyze each new process well and react to it accordingly. Accordingly, it is possible to evaluate Topçu’s approach to the globalization process within the framework of the “sceptical approach”.

Recai Coşkun, Chief Advisor to the leader of the MHP, also defines globalization as the integration of the world system and the formation of sub-rational systems. In this context, it is impossible to be affected or not integrated from globalization. However, it also stresses that the most difficult political parties in the process of globalization are nationalist parties. Because,
according to Coşkun, in the basic approach of globalization, there is no harm in the division of nations into sub-identities. In contrast, regionalization and integration into the global process are encouraged, and the only distinguishing factor is the “national structure”. In this context, Coşkun says that there is an inexhaustible conflict between national structures and globalization and that the different definitions of globalization and the different practices that derive from these definitions have an impact on the origin of this conflict. Therefore, this is where MHP’s main objection to globalization is shaped. The MHP objects to the relationship between exploiter-exploited, judge-prisoner, imposed-imposed. At this point, it is possible to say that Recai Coşkun, like Zuhal Topçu, considered the phenomenon of globalization as an inevitable process as a result of the rapid changes in communication and information technologies. However, it can be said that they have a sceptical attitude towards the phenomenon of globalization due to their stance against imperialism which can be shown among different definitions and dimensions of globalization.

When we look at the globalization approaches of the party executives from the AKP, it is possible to say that the globalization approaches of both party executives are much more moderate than MHP executives. Furthermore, it is possible to say that the AKP executives evaluate the innovations that come with the globalization process on the basis of opportunities and therefore have a pro-globalization discourse. On the other hand, the approach of the ruling group from MHP to globalization can be described as “sceptical”. Because while the participants of the MHP emphasize the inevitability of the globalization process, they also evaluate the many innovations that come into human life through globalization on the basis of threats.
Perspectives of Partisans to Globalization Approaches

In this section, globalization approaches of party members are discussed. How the members of the party perceive and approach globalization is important to see the harmony or incompatibility between the party’s globalization policies and the views of the party base. The statements expressing the attitudes and perceptions of party members towards globalization are as follows: 13. Globalization should be approached with suspicion. 14. When considering the positive and negative aspects of globalization; have an anti-globalization approach. 25. Globalization adversely affects our cultural structure. 26. The removal of all limits of times around the world and the emergence of global culture is a positive development for Turkey. 27. Globalization means entering the economic dominance of the west. 33. We must strengthen our political institutions against global political domination.

Expressions addressing the views of party members on global issues and their effects are as follows: 18. The phenomenon of globalization raises the standard of human rights in the world. 19. The phenomenon of globalization is improving its human rights standards in Turkey. 20. The rise of global economic relations is increasing the economic power of Turkey. 21. Turkey’s economy is negatively affected by globalization. 23. The development of global economic relations increases poverty in the world. 24. The rise of global economic relations is increasing poverty in Turkey. 27. Global adapt to environmental policy, it will lead to improved environmental problems in Turkey. 28. With globalization, both individuals and political parties become more sensitive to environmental problems. 29. The globalization of environmental problems also increases environmental problems in Turkey. 30. The global politics of the terrorist attacks in Turkey, there is also the effect.
When the statements related to the globalization approach are analyzed in general and the percentages (%) distributions and frequencies regarding the responses given by the parties are analyzed in detail, it is seen that there is a parallel difference between the two parties regarding the globalization approaches. When we evaluate the arithmetic means and standard deviations on the basis of parties, the level of participation of AKP party members in expressions approaching globalization with suspicion is in the range of 2.40 negative points and thus low-level participation, whereas MHP party members are in the middle of the 2.97 point range. It can be said that they agree on the level of participation and expression rates are higher than the AKP. Based on the variables in the statements, it is seen that AKP has a standard deviation of 1,278 and MHP has a standard deviation of 1,511 when the different status of the answers is evaluated.
Conclusion

As a result of structured interviews with party programs, election declarations and headquarters examined by the researcher, AKP is considered to be relatively more liberal and warmer to globalization than MHP. However, it is not foreseen that AKP member’s participation in the statements regarding globalization approaches is not at the expected level. This reveals that, unlike the headquarters policies of the party base, globalization is relatively sceptical, with reference to the table above, when we look at the distribution of political trends according to party variables, it is seen that about 30% of AKP participants have identified themselves as nationalist and nationalist-conservative. It supports this result. As a result, this situation brings the AKP and MHP base closer to each other at a sceptical point of view against globalization.

It was seen that the participants of the MHP participated in the statements which took globalization with a sceptical approach at a higher level compared to the AKP participants due to the influence of nationalist ideology and its distant stance against globalization within the framework of party policies. In other words, it is possible to see the reason why the participation rates in the statements about globalization approaches do not show a significant difference as an extension of the Turkish political system based on the threat. It can be said that the perception of protecting and empowering the country, the state and/or the nation against external factors/others makes the responses to this statement relatively homogeneous. As a matter of fact, when the political tendency distributions according to party variables are taken into consideration together with this statement, the reflex quality responses that approximately 35% of the AKP defines itself as nationalist and nationalist conservative can unexpectedly change the level of participation. Thus, despite the AKP leadership (which defines itself as a party that follows conservative-democratic and policies consistent with global politics), nationalist tendencies based on the perception of external threats emerge on the basis of the party.
References

The Use of Information and Communication Technologies (ICT) in the Banking Sector in Turkey

Murat ACET

Abstract

As the products and services in the banking sector are rapidly becoming digital, a significant part of the competition in this sector is in the field of information and communication technology. Therefore, in recent years, the world and in Turkey, the technology investment budget of banks has increased considerably. Since concepts such as virtual reality, machine learning, cloud technologies, artificial intelligence, biometric verification, intuitive business models gain importance in every field including finance; the banking sector had to adapt products and services, organizational structures, decision-making mechanisms, management strategies, and business models to this digital transformation. Over time, there are significant increases in the number of corporate and individual customers using digital products and services. The banking sector is rapidly digitizing, especially in non-cash transactions. In addition, the Turkish Banking sector and the rest of the world, Information, and communication technologies are used effectively in basic banking application transactions, money transfers, payments, investment transactions, sales and marketing of insurance products and services, credit card transactions. In this study, the use of information and

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communication technologies of the Turkish Banking Sector has been analyzed and in the light of comparative data, the place and competitiveness of the Turkish banking sector in world banking have been examined. The use of ICT in business models of the Turkish banking sector was discussed and it was concluded that it has a progressive and competitive structure in the world.

**Keywords:** Banking ICT, Digitization, Competitiveness.

**JEL Codes:** G21, D80, L81

**Introduction**

Technology and the pace of progress affect the economy from many dimensions. The banking sector, as a sector that uses ICT extensively, has to keep up with this fast pace of technology. In the banking sector where competition is getting more and more difficult, banks benefit from information and communication technologies in terms of reducing transaction costs, providing efficient service, increasing service speed and scope, introducing innovative approaches and reaching out to a wider audience. While information and communication technologies provide these benefits to the banking sector, banks have started to attach more importance to the information and communication technologies that make them more competitive and invest more in this field.

Information and communication technologies can be divided into two main groups as Information Technologies and Communication Technologies. Information Technology has three sub-titles. These are Hardware, Software, and Services. Under the Hardware, headings are Computer Systems (desktop, laptop, tablet, electronic reader), Servers and Storage Units, Printers, Scanners and Other Peripherals and Local Area Network
Devices. Under the software, the title is Operating Systems and Databases, System Management Software, Desktop Applications, Security Software, Business Applications, Mobile Applications, and Games. Under the service, the title is Outsourcing Services, Consultancy Services, Development, Integration, Installation and Operation Services, Support, Maintenance and Training Services. The second main branch of Communication Technologies has two sub-titles. The first is the Hardware. The scope includes Fixed and Mobile Telephone Systems, Network Technologies, Telecom Hardware, and Related Services. The second subtitle is Electronic Communication. This includes Fixed and Mobile Communication Services, Infrastructure Management Services, Cable Services, and Satellite Communication and Platform Services. (IT Industrialists Association of Turkey [TÜBİSAD], 2019)

In the field of banking and finance, some new concepts originating from information and communication technologies are now more widely used. These; Virtual Reality, Machine Learning, Cloud Technology, Artificial Intelligence, Biometric Verification, Intuitive Business Models and Blockchain.

Thanks to 3D technology, banking is rapidly advancing to use the Virtual Reality technology, which gives its users the feeling that they are in a bank branch. Thanks to this technology, customers can find various banking products and services as if they were in a virtual bank branch. In addition, it is possible for the bank customer to contact the financial advisor and obtain information in an impressive way.

Machine Learning means that the machine can develop algorithms and perform statistical analysis in order to estimate the output against changing conditions with basic input data without programming. Thanks to this technology, the investor is able to calculate earnings against variable market and economic
conditions, develop investment scenarios and make predictions. With the spread of Machine Learning technology especially in the banking sector, it is possible for almost all investor profiles to estimate investment cost/profit ratio and make investment decisions under alternative market and economic conditions. Technology is a technology that will contribute not only to this aspect but also to make effective and correct choices in many areas of bank-customer interaction. The difference of this technology from artificial intelligence is that the computer can offer profitable financial options and banking products by developing alternatives that are suitable for variable conditions in multivariable and high volatility market conditions.

Nowadays, storing data locally is a difficult, risky and expensive method. Instead, with information and communication technologies, businesses have begun to turn to cloud technologies that allow secure, cost-effective and inexpensive storage of data. The business world can then easily store, report, transmit and share huge amounts of data. As a sector that works with intensive data sets, the banking sector can create a competitive advantage by using Cloud Technology for secure, fast and economical data storage and reporting operations. It is possible to access data quickly and independently of the environment (Windows, Linux, iOS, Android, etc.) in many areas from credit rating information to international transactions. Thus, speed, accessibility, profitability, and competitiveness related to these activities are obtained.

Artificial intelligence is based on the principle of simulating human intelligence in a computer simulation framework. Today, artificial intelligence technology is used in areas such as information storage, money transfer, and information updating. In time, the usage area of this technology will expand and will be used in banking in many areas ranging from the promotion
and sale of financial products to credit transactions, acquisition of customer experiences, and reporting to decision structures. This technology has provided significant benefits in real-time data processing, higher productivity, lower cost, improved and expanded the user experience and the creation of new workspaces. It is a technology that can create a competitive advantage with its more effective and widespread use in the field of banking.

Security is one of the most important issues for organizations providing banking and financial services on the internet. Virtual environments, as well as the opportunities offered, has entered into our lives with threats. In this respect, banks are sensitive to cybersecurity as well as providing an effective technical service to their customers. SSL (Security Server Layer) and Firewall technologies as well as the banking sector; by opting for biometric verification technologies such as voice, fingerprint, and retinal scanning, it tries to provide competitive advantage while providing effective virtual security. The use of unique human characteristics (such as fingerprints, voice, retina) in human biological structure is a distinctive feature for banks in terms of the use of advanced security features against virtual risks.

In the field of finance and banking, there is now a shift towards intuitive business models that take data from the source, understand, analyze, and refine and present data. This business model, combined with trained manpower, provides high efficiency, low cost, and competitive power. In recent years, banks have been attaching great importance to the interpretation of information through data analytics in order to reach the customer in a correct manner. This business model is constantly developing thanks to the information and
communication technologies infrastructure that uses machine learning and artificial intelligence technologies.

With the introduction of the concept of the Internet of Things in our lives, data has grown at an extraordinary speed, but can only be analyzed with advanced computer systems. Intuitive business models are able to collect data from social media, reach potential customers, and even stimulate demand to create jobs. The decision-makers of the banking and financial sector are looking for how to use information and communication technologies more efficiently and effectively.

Banks are trying to make their investments more efficient and effective in Design Studios that analyze web and mobile platforms in detail in high-potential financial centers. It is possible to identify potential and current customers’ needs step by step on web and mobile platforms by tracking them and trying to construct a suitable business model towards the determined target. Cross sales are combined with customer profile studies to increase success.

Spain-based BBVA Bank is an example of these studies. This bank managed to strengthen its reputation management by listening to social media with intuitive business models. It has been able to reach its customers and target audiences through the right channel and in the right way through news portals, blogs, forums, Facebook, Twitter, and other social media channels. Korea Exchange Bank tries to increase its banking success rates by analyzing disaster processes. SNS Bank, based in the Netherlands, has developed a multi-channel marketing model supported by Analytic, making it possible to make more accurate moves towards the expectations of bank customers. Based in Argentina, BIA has managed to significantly increase its earnings with the Intuitive Business
Model, which aims to provide resources and target optimization in banking products and services.

The blockchain system is a constantly growing list of records called cryptography, which is linked and made independent and secure, distributed and not controlled by a political authority. Money, products, goods, services, business, and property can be transferred without intermediaries in this system. In the financial field, it is becoming a serious competitor for the banking sector with its reliability, precision, and transparency. Instead of competing with this system, the banking sector should adapt to this field with the support of information and communication technologies and take the wind of the rapidly expanding blockchain system in the world and turn towards achieving great success.

The banking sector has established a new course of competition with the understanding that develops, accelerates, diversifies and focuses on customer and information and communication technology infrastructures and initiated the technology-based competition.

Today, banking has become a field of activity that provides 24/7 service with almost all products and services. The limitations of the sector, which have the ability to provide services independent of time and space through information and communication technologies, are unfortunately dependent on the prevalence and speed of the internet infrastructure.

**Literature Review**

Technological developments have transformed many banking products and services into activities based on information and communication technologies and brought vitality to the field of finance and banking (Adesino & Ayo, 2010). The interaction
between the banking sector and information and communication technologies is now a generally accepted reality. Competition increased the expectations of customers from banks and the banking sector restructured itself by using information and communication technologies (Loonam at all, 2008).

In many studies, the effect of information and communication technologies on the profits and costs of the banking sector has been confirmed (Kozak, 2005). It is also accepted that the development of information and communication technologies significantly reduces the cost of global fund transfer.

There are studies showing that banks using information and communication technologies can offer banking products and services with less effort and high quality (Berger, 2003). It is known that information and communication technologies, especially in payment transactions and other routine transactions, facilitate banks’ procedures and reduce transaction costs.

Studies investigating the effects of the use of information and communication technologies on bank performance have been conducted on US, European and Australian banking systems. Carlson et al. (2000) and Furst (2002) examined the relationship between technology and profitability in the USA and found a positive relationship between them.

Haq (2005) showed that information and communication technologies are effective in reducing information asymmetry among bank customers and this depends on the efforts of banks to reach customers.

In his study, Claessens (2001) found that electronic banking reduces the transaction cost and is advantageous for the bank customers because of the lower call costs.

DeYoung, in his study of the US banking sector in 2005, found that banks using information and communication technologies had a lower cost, especially in terms of deposit
service costs, compared to traditional banks, which led to an increase in banking profits.

Centeno (2004) found that the lack of technological infrastructure in EU member states constitutes an obstacle to the transition to electronic banking and impedes the reduction of service costs, in his study.

Grönroos (2001) found that the use of information and communication technologies in the banking sector (online banking, mobile banking, ATM, etc.) facilitates the expansion of banking services to a wider audience.

Mattos (1999) found that information and communication technologies contribute to avoiding the long queues most frequently complained by bank customers, limited time pressure allocated for customer service, possible transaction errors and excessive bureaucracy by bank employees.

Al-Hawari et al. (2005) found in his study that information and communication technologies are a factor that increases customer loyalty towards banks.

Shoebridge (2005) found that with the widespread use of information and communication technologies in banking and the increase in the number of ATM machines, the most repeated problems were reduced and improvements in customer relations were observed.

Castro (1997) and Dick (2003) found that access problems resulting from the location of branches decreased with the spread of information and communication technologies, personnel costs decreased and the waiting times at the branches were shortened. Furthermore, it has shown that the time allocated by bank personnel to customers in need of assistance is increasing.

In their study, Cox and Dale (2001) gather the bank customers’ expectations from the bank’s web page under four headings. These include ease of use, security, online resources, and the
presence of a customer relationship service. Providing them has determined that customer satisfaction and loyalty can improve.

**Methodology**

Based on the study carried out by Deloitte on 238 banks and 10 FinTech in 38 countries in 2018, it is possible to divide banks into four different categories in the use of information and communication technology and digitization. First, they are the most successful in digital banking. These are banks that provide a wide range of digital functionality to their stakeholders in their products and services and meet the expectations of their stakeholders and customers. The second category comes from those who can follow the trends of the digital world. Following this are those who have adopted the developments and trends in finance, and in the last category are those who have been delayed in the digital transformation. In this study, more than eight thousand bank customers were reached and a total of four channels (Bank Branch, Telephone Banking, Internet Banking, and Mobile Banking), three of which were digital channels, and approximately two hundred thousand data points were analyzed. With this study, the digital maturity of banks was examined and a survey was conducted to measure the expectations of bank customers. In this study, the banks with the highest financial assets in European, Middle Eastern and African countries are discussed (Deloitte, 2018).

In this study, first of all, information was collected about the products and services offered by banks via web pages and social media platforms. In the second stage, the bank was contacted via digital media and some basic transactions such as opening an account were made. In the next stage, the success of the customers in guiding them while using
the digital platforms of the bank was examined. In the next stage, the Bank’s digital platform is tried to be measured in daily and routine, simple banking transactions, and being user-friendly. In the last stage, in digital platforms of banks; credit, time deposit account, mutual fund, insurance, etc. cross-selling of products and services has been tried to be analyzed (Deloitte, 2018). In this study conducted by Deloitte, the Bank’s journey to reach the customer has been analyzed by following four different channels (via bank branches, internet banking, mobile banking, and telephone banking).

Turkey to data related to the banking sector Banks Association of Turkey, “Digital, Internet and Mobile Banking Statistics” study, reference has been reached. A member of the Banks Association of Turkey 22 of the mobile, and 27 of them over the internet, which has been tried on a sample of banking services. The data covers March 2017-2019 period.

Findings

The banking sector can generally be said to benefit from technology in two dimensions. The first dimension includes the products and services offered; is the use of technology to increase quality, impact, and speed, and reduce costs. This is achieved through the use of computer and communication technology on every platform where banking services are provided. The second dimension is banking through alternative channels supported by technology.

The products and services offered by the banks can be provided directly through the bank branches or delivered to the customers via alternative channels. Since a bank’s service through its branches reaches its customers directly, this channel is a direct and traditional way. However, in today’s world this method; as the size of the audience reached is limited due to
time, cost and space constraints, banks have also tended to offer products and services through alternative channels in addition to direct channels. In this regard, technology and especially information and communication technologies offer a short, economic, effective and comprehensive alternative to reaching customers in the banking sector as in many other sectors. Banks; Thanks to the internet and mobile banking, ATM (Automatic Teller Machine), telephone banking and TV banking channels; can reach wider audiences at a lower cost and more efficiently while providing services independent of time and space.

In 2018, Deloitte conducted a study to measure the digital maturity levels of banks. According to the results of this study, thanks to the use of information and communication technologies, countries that meet the expectations of customers and offer functionality, having a banking system; Spain, Poland, Turkey, has been identified as Russia and Switzerland. France, the Czech Republic, Finland, Norway and the Republic of South Africa follow the developments and trends in the world of information and communication. Adopting the developments in the field of Information and Communication; Austria, Belgium, Bulgaria, Croatia, Denmark, Estonia, Germany, Hungary, Italy, Lithuania, Luxembourg, Netherlands, Qatar, Romania, Slovak Republic, Sweden, England. Countries that follow developments in the field of information and communication with delay; Iceland, Ireland, Israel, Jordan, Kuwait, Lebanon, Latvia, Saudi Arabia, Slovenia, and the United Arab Emirates.

Both forcing customers and competition in the banking sector encourage banks to invest in information and communication technologies. In 2018, the global banking sector invested approximately $ 9.7 billion for the front office transactions, where direct communications with customers were made.
However, while nearly half of the world’s banking sector (44%) has completed its digital transformation and is at an advanced stage, the rest have not yet reached that point (Mayo, 2018). 84% of consumers worldwide today have access to online banking and have used mobile applications at least once. However, the use of digital banking is largely transactional and informational, such as money transfer and updating account details. While 78% of bank customers use digital banking to pay bills, mobile applications in transactions such as loan applications are rapidly increasing, but are still around 30%. In a study conducted with 17 thousand banks in 17 countries and customers around the world, it was determined that customers were very satisfied with the digital transformation of banks. The Bank has increased the loyalty of its customers’ digital banks to their primary banks. When the use of information and communication technologies in the banking sector by bank customers is examined, it can be said that there are three different bank customer profiles. Of these, those with a traditional perspective account for about 28% of total customers. These are primarily light digital users using branches and ATMs. Those who adapt to online banking account for 43% of the total customer base. These customers prefer internet and mobile platforms primarily for their banking transactions. The last group is digital adventure lovers. They account for about 29% of total bank customers and use digital channels more often than others. Another characteristic of the group is that they have established a deep emotional connection with their primary banks (Deloitte, 2018).

According to Deloitte’s Report on Accelerating Digital Transformation in Banking in 2018:
14% of global bank customers never use bank branches. 61% use at least once a month, 21% 2-5 times a month, 3% 6-9 times a month, 2% more than 10 times a month.

14% of these customers never use ATMs. 33% use bank branches at least once a month, 38% 2-5 times a month, 9% 6-9 times a month, and 6% more than 10 times a month.

22% of bank customers in the world never use the Call Center. 67% use the Call Center at least once a month, 8% 2-5 times a month, 2% 6-9 times a month and 1% more than 10 times a month.

18% of the Bank’s customers never use Online Banking. 18% use Online Banking at least once a month, 29% 2-5 times a month, 13% 6-9 times a month, 22% more than 10 times a month.

The situation in mobile banking applications is as follows: 29% of the Bank’s customers in the world never use Mobile Banking applications. 18% use mobile banking applications at least once a month, 21% 2-5 times a month, 11% 6-9 times a month, 22% more than 10 times a month.

Turkish banking sector; It consists of 53 banks transferred to 3 public, 9 private capital, 21 foreign capital, 13 development and investment, 6 participation and 1 savings deposit insurance fund. It ranks 13th among OECD countries with total assets of 712 billion Euros. It ranks 26th with total assets per capita of EUR 9000 and ranks 23rd with 67% credit/GNP ratio. With 5,000 euros per person per Turkey, 28 to 80 billion Euros and shareholders’ equity of Values Values 9 is located. The Turkish banking sector creates 186,000 jobs, with a total of around 12,000 branches and 46,000 ATMs (TBB, 2019).

In 2018, the Turkish Banking Sector, which increased its investments in technology by about a quarter, took important steps, particularly in the area of open banking. Numerous
FinTech institutions serve in the field of open banking, which can be defined as allowing third-party institutions to develop financial services through the API (Application Programming Interface) offered by the banks, and significant investments are made in this field.

Approximately one-third of Turkish banks are digitally mature, while the other 30% is in the process of digital transformation. Technology investments focus on developing new products, increasing productivity, reputation management, and digital transformation. 86% of banks acknowledge the importance of technology investments in employee selection processes and 57% in developing cooperation with FinTech companies. 50% of Turkish Banks are aiming to invest in artificial intelligence, internet of objects, cloud computing and cybersecurity in the next three years. Investment in the field of data analysis (88% of banks), biometric-based identity deviation software (63% of banks), blockchain (25% of banks) and robotic process analysis (25% of banks) in 2020 and subsequent years is committed to making (EN, 2018).

In Turkey and in the world, by some of the traditional bankacıklık sector clients, digital channels are not preferred because of its complexity. However, about 40% of those who complain to banks use contact centers, 26% use branches, and the rest use digital channels.

In 2018, 54% of the Bank’s customers used the bank branch, 4% Call Center, 30% Online Banking and 12% Mobile Banking applications for account transactions.

In savings transactions, 54% of bank customers preferred bank branches, 5% preferred Call Center, 30% preferred Online Banking and 11% preferred Mobile Banking.
In bank card transactions, 49% of customers used bank branches, 6% used Call Center, 33% used Online Banking and 12% used Mobile Banking.

In credit card transactions, 44% of bank customers preferred bank branch, 7% preferred Call Center, 38% preferred Online Banking and 11% preferred Mobile Banking.

In personal loan transactions, 61% of bank customers used bank branches, 4% used Call Center, 30% used Online Banking and 12% used Mobile Banking.

In mortgage transactions, 69% of bank customers used bank branches, 6% used Call Center, 19% used Online Banking and 6% used Mobile Banking.

In mortgage transactions, 68% of bank customers used bank branches, 7% used Call Center, 19% used Online Banking and 6% used Mobile Banking.

In Asset Management and Intermediary Transactions, 62% of bank customers used bank branches, 6% used Call Center, 24% used Online Banking and 8% used Mobile Banking (Deloitte, 2018).

According to data from across the country Banks Association of Turkey, in the first quarter of 2019, the number of retail and corporate banking customers is around 46.297 million active digital people. During this period, 4,500,000 people engaged in online banking only and 34,000,000 people engaged in mobile banking only. The number of banking transactions on both platforms is approximately 8,000,000. Compared to the previous period, digital customers of banks increased by 5%.

The number of corporate clients at least once entering the digital platforms of banks in the first quarter was 1.994 million people. This figure has been determined as 62.328.000 in individual customers. The number of individual customers using digital platforms at least once in the last year is 2,694,000.
One out of every six individual customers within the customer networks of the banks entered the internet banking platforms once in the last three months and one out of every three customers at least once in the last year.

In the first quarter of 2019, 130,000,000 transactions made via internet banking were recorded and the monetary value of these transactions amounted to 1.3 trillion TL.

Digital Banks Association of Turkey, according to the Internet and Mobile Banking Statistics January-March period of 2019, with Internet banking channel:

While 69 million TL transfer transactions were realized, its transaction volume was 963 million TL,

35 million payment transactions were made and the transaction volume of these transactions was 54 million TL,

While 13 million TL investment transactions were realized, the transaction volume of these investments was 265 million TL,

While 8 million TL credit card transactions were realized, the transaction volume of these credit cards was 22 million TL,

4 million TL other financial transactions were realized and the transaction volume was recorded as 36 million TL.

A total of 130 million TL transactions were made during this period and the transaction volume was around 1.3 trillion TL and the number of transactions and transaction volume decreased by approximately 2% compared to the same period of the previous year.

During the above-mentioned period, the ratio of customers using the mobile platforms of banks to registered customers was measured as 64%.

Digital Banks Association of Turkey, according to the Internet and Mobile Banking Statistics January-March period of 2019, 422 million TL transactions were made with the mobile banking
channel. The trading volume is 958 billion TL. Transactions such as EFT, wire transfers and foreign currency transfers constitute 57% of the total. In total, 292 billion TL investment was made on mobile platforms.

Conclusion

Almost all economic activities and sectors in the world are in a competition shaped by intense innovation and technology. With each passing day, information and communication technologies are gaining more place and importance in our lives. The banking sector, both on a global scale, both in terms of Turkey, continuously and at an increasing speed, the use of technology and are striving to gain competitiveness through technology. While this transformation based on information and communication technologies has become increasingly important in the investments of the banking sector, technology has become an important strategic variable in determining the winner of the competition.

The banking sector as in the world and in Turkey, artificial intelligence, machine learning, virtual bank branches, biometric authentication, cloud technologies using intensive than new information and communication technologies and more efficient, so is trying to win competitiveness. These technologies, which require a significant amount of technology investment, are emerging as a new competition area in addition to product and service price and quality competition in the banking sector.

The Turkish banking sector is successful as one of the few countries that have reached the level of technological maturity by achieving the necessary transformation on a global scale. Alternative service channels of customers in the banking sector are not lagging behind in the world in terms of usage
statistics, and may even be said to be ahead of the average in some areas.

Banking sector customers in Turkey, increase the awareness of information and communication technologies; will positively affect mobile, internet and telephone banking, lead to more efficient use of technology, and facilitate the achievement of targeted, competitive technology-based global competitiveness in the banking sector.

It is possible to increase the competitiveness and maintain its profitability with the effective use of information and communication technology in the banking sector and with an understanding that attaches importance to innovation. Thanks to this new business model, the Turkish banking sector will reach a more successful and effective point in an innovative approach that effectively uses information and communication technology in a lane where the pace of development is determined by global competition criteria.
References


Yusuf ÖCEL1 & Emine UZUNDAL2

Abstract

The purpose of this research is to investigate whether green trust plays a mediating role in the impact of green product awareness on consumers’ intention to purchase. The universe of the research consisted of consumers living in the Çankaya district of Ankara province. In this study, a quantitative research method is used, and data were obtained through questionnaires. SPSS software package is used to analyze the data. The total number of questionnaires evaluated and used in data analysis is 406. Frequency analysis, descriptive statistics, correlation analysis, explanatory factor analysis, regression analysis, t-test, and ANOVA are applied to the data obtained, and hierarchical regression analysis is performed for the mediator variable. Looking at the results of explanatory factor analysis, green product awareness is found to be four dimensions, purchasing intention and green trust to be one dimension. Green product awareness dimensions are determined as green product promotion activities, environmental concern, environmental information and impact groups. Green

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product promotion activities dimension consists of 8 items, environmental concern dimension 10 items, environmental knowledge dimension 5 items and impact groups dimension 5 items. Purchase intention consists of 4 items. The green trust dimension consists of 8 items.

When the results obtained in the study are examined, there is a significant positive relationship between purchase intention and green product promotion activities, environmental concerns and impact groups dimensions of green product awareness. Similarly, there is a significant positive relationship between green trust and purchase intention. When the mediation effect of green trust is examined, it is revealed that green product promotion activities and impact groups variables, which are the dimensions of green product awareness, played a partial mediating role in the effect on purchasing intention, and that environmental concern and environmental information variables don’t play a mediating role in the effect on purchasing intention.

Keywords: Green Product Awareness, Green Trust, Purchase Intention, Green Consumption.

JEL Codes: M31, M21, M37

Introduction

The present and future conditions of society depend on events taking place for millions of years (Kadıoğlu, 2008: 8). People have used natural resources irresponsibly from the past to present with the idea of dominating nature (Akın, 2006: 37). Events such as Bhopal disaster in 1984, the discovery of a hole in the ozone layer in 1985, the Chernobyl disaster in 1986, and the Exxon-Valdez oil spill in Alaska in 1989 (Peattie, 2001: 131) have significantly affected society’s interest in the environment (Yavuz, 2009: 129). Global warming research
has found increasing emissions of greenhouse gases to the atmosphere (Karakaya and Özçağ, 2001: 1-2). Climate change partly caused by greenhouse gases disturbs the ecological balance and becomes one of the most important threats to the well-being of people (Kadıoğlu, 2008: 2). The development of industrial activities, the change in the use of land and resulting agricultural activities are also effective in the increase of greenhouse gas emissions (Çelik et al., 2008: 9). World Meteorological Organization (WMO) reports that global warming increased after the 1980s and reached the highest level in the 1990s and 2000s (WMO, 2000: 5).

Consumers want to leave a more liveable world to future generations. For this reason, minimizing the harm to nature has become more important in the production processes of goods and services (Baran, Söylemez and Yurdakul, 2017: 1). According to Ottoman (1993), most consumers examine the environmental features of the products before purchasing them and consider themselves environmentally sensitive (cited by Stokes, 2009: 1). Consequently, the concept of “green” is gaining importance in today’s world.

The research report of Consumer and Environmental Education Foundation, entitled “The Impact of Environmental Management and Sensitivity of Enterprises on Consumer Behavior” based on 1536 face to face interviews in 26 provinces in 2012, states that green consumption means “consumption of vegetables, fruits, green products, and vegetarian nutrition” for the 54% of participants. Furthermore, 55.9% of the participants are involved in environmental protection practices, as opposed to 44.1% of the participants who are not. The report also reveals that 71.7% of the respondents do not buy any environmentally friendly products with prior knowledge (http://www.tukcev.org.tr).
The research report of Consumer and Environmental Education Foundation, entitled “The Impact of Environmental Management and Sensitivity of Enterprises on Consumer Behaviours” based on 1536 face to face interviews in 26 provinces in 2012, states that green consumption means “consumption of vegetables, fruits, green products, and vegetarian nutrition” for the 54% of participants. Furthermore, 55.9% of the participants are involved in environmental protection practices, as opposed to 44.1% of the participants who are not. The report also reveals that 71.7% of the respondents do not buy any environmentally friendly products with prior knowledge (http://www.tukcev.org.tr).

Another impact of the environmental movement is the introduction of the concepts of ‘green advertising’ (Yavuz, 2009: 129) and ‘green trust’ (Chen 2009: 309) in the context of green marketing in the literature. Consumers have worried about misleading advertisements pretendedly highlighting the natural and green concepts. Thus, trust is a critical issue when buying green products. Dagnoli’s study (1991) finds that 83% of respondents prefer buying environmentally friendly products, while only 15% of participants perceive the environmental claims of advertisements quite trustworthy (cited by Shrum et al., 1995: 71). Similarly, the survey by Chase and Smith (1992) concludes that there is significant distrust towards green advertising since environmental claims are not credible to most consumers (Cited by Shrum et al., 1995: 71). Considering the research findings, it is crucial to analyse the relationship between green product awareness and green trust. It is also important to understand whether purchase intention emerges as a result of the relationship between these two variables. As a result, this research will examine the relationship between green product awareness, purchase intention, and green trust.
Green Product Awareness

The concept of ‘green marketing’ was initially discussed in a seminar on ‘Ecologic Marketing’ organized by the American Marketing Association (AMA) in 1975 (Erbaşlar, 2012: 95). Green marketing as emerged since the 1970s plays an effective role in the production, consumption, and the entire product life cycle until the product disappears by consumption (Aslan and Çınar, 2015: 169).

Among the golden rules of green marketing are as follows: Knowing that you are a customer; educating customers; being genuine and transparent; reassuring buyers; considering pricing; giving customers an opportunity to participate; and accepting that consumer expectations change (Mishra and Sharma, 2010: 11).

Basaran (2007) divides the green marketing approach into four separate stages. In the first stage, green products are designed for environmentally friendly consumers. Vehicles operating with alternative fuel technology are examples of this stage. In the second stage, green strategies are developed. Examples include increasing energy efficiency and taking measures to minimize the amount of waste generated. In the third stage, businesses should end producing environmentally unfriendly products and produce only environmentally friendly products. In the last stage, marketers and businesses should be both environmentalists and socially responsible (Başaran, 2007: 4). As a result, the green marketing approach requires businesses to strive for adapting new conditions and develop accordingly.

Green product, green price, green distribution and green promotion constitute the green marketing mix (Erbaşlar, 2012: 98; Duru and Şua: 2013: 127; Onurlubaş et al., 2017: 283). 4S formula has been proposed for addressing the difficulties in defining an environmentally friendly product (Erbaşlar, 2012:
This formula can be summarized as follows:

**Satisfaction**: Satisfying the needs and demands of consumers regarding products and services.

**Sustainability**: Ensuring the sustainability of resources used in the production of products and services.

**Social Acceptability**: Avoiding harm by businesses and products to living beings, humans, and other countries while being accepted by the public.

**Safety**: Purifying the product from the elements threatening consumer health.

The products with green technology that do not cause environmental hazards are called green products. Green products can be described as recyclable, reusable, and biodegradable. They have eco-friendly (reusable) packaging and do not harm or pollute the environment. Green products are also not tested on animals (Mishra and Sharma, 2010: 10).

**Environmental Concern**

Consumption and production are the essence of human activities to survive in the world. Environmental pollution increases as companies demand more natural resources for their production activities. According to the results of the United Nations Development Program, unsustainable production and consumption increasingly continue (Turkey Ministry of Environment and Urbanization, 2013: 440). The environmental concern arises from consumer worries about many diverse environmental problems (Delice and Koçer, 2016: 116).

Environmental concerns can motivate purchase intention, while prices limit it (Smith and Palodino: 2010: 95). Environmental concerns extend from specific attitudes to more environmentalist
value orientations. It can take place in different phases such as developing general attitudes for behaviors, changing a possible behavior, and putting it into practice (Fransson and Darling, 1999: 370).

Chronologically, research on environmental concerns focused on ecology in the 1970s, mainly on pollution and energy conservation. In recent years, it has focused on a general concern also including the development of scales to measure environmental structures. While the 1970s were primarily characterized by an interest in pollution and energy conservation, a more global concern arose in the 1980s (Zimmer et al., 1994: 64-65). In recent years, consumers have become more conscious of the environment, environmental problems, and avoiding or minimizing environmental harm. With the developments of sustainable production and consumption, many products and services associated with terms such as recyclable, organic and environmentally friendly are offered to the markets (Bıkarı et al., 2017: 146).

Another factor to consider is the individual perception that views environmental degradation as a threat to his/her own health (Fransson and Darling, 1999). The green marketing has emerged for growing markets of sustainable and socially responsible products and services. Various studies by environmentalists show that people are concerned about the environment and interested in changing their behavioral patterns by becoming less hostile to it. This trend increases the market share of sustainable and socially responsible products and services. Today, both individual and industrial consumers are more concerned about environmentally friendly products (Mishra and Sharma, 2010: 9-10). Republic of Turkey Ministry of Environment and Urbanization decided that plastic bags would be provided for a fee to the user or the consumer at
the sales centers as of 1 January 2019. The Ministry stated that it takes 10 years for a metal box, 400 years of a plastic bag, thousand years for a pet bottle and 4 thousand years for glass to break down in the environment. “Only 1 percent of a plastic bag can be recycled due to its chemical structure. Its recycling is more expensive than producing a new one.” According to the Ministry, “plastic bags, regardless of the type of activity, including remote sales, textile, toys, electronics, food and similar points of sale will be charged a minimum of 25 cents as effective from January 1, 2019” (RT Ministry of Environment and Urbanization, 2019).

Environmental Information

Environmental information includes what people know about the environment, basic relations causing environmental impacts, and the appreciation and common responsibilities of all systems for sustainable development (Mostafa, 2009: 11031). Inadequate information on consumers’ green purchase intention has become a major obstacle to developing effective marketing strategies for green products. If consumers have enough information about environmental problems, their awareness levels will increase and potentially they will develop positive attitudes towards green products (Aman et al., 2012: 145-148). Environmental knowledge develops in two ways. First, consumers must be educated to understand the environmental impact of a product. Secondly, the information that the product is produced in an environmentally friendly way must be included in the consumer information part of the product to ensure the trust of the consumer. An eco-label is a good criterion for making an informed initial choice for first-time green product buyers (D ‘Souza et al., 2006: 148).
The use of information technologies help more quickly inform broader communities of consumers about environmental protection. Green Information Technology initiatives can greatly contribute to environmental sustainability. Green Information Technology includes environmental sustainability dimensions, energy efficiency economics, and total cost of ownership including the cost of disposal and recycling. The value of Green Information Technology is derived from the resources to be used to turn green awareness into real life. It aims to improve economic applicability, system performance, and its usage while fulfilling social and ethical responsibilities (Chou and Chou, 2012: 448).

Environmentally Friendly Products and Promotion Activities

Environmentally-friendly production is the one made in cooperation with nature while considering future generations and the environment. It does not leave harmful waste, damage nature and living beings, produce toxic waste, and generate greenhouse gases such as methane and carbon dioxide (Yücel and Ekmekçiler, 2008: 322).
Businesses that produce goods and services for pleasing environmentally sensitive consumers and fall under the scope of Environmental Law should provide certain information. Such businesses must provide convincing information on the green features of their products as well as the benefits to the environment and consumers. The advertising sector makes efforts to address environmental attitudes and convince customers. A key strategy is putting forward the benefits of the products and services for the environment (Duru and Şua, 2013: 129). Promotion efforts for facilitating the sale of a product or a product range start after completing the activities related to the product, price, and distribution. In its attempt to influence the attitudes and behaviors of customers, promotion must provide information that the right product with the right price is offered at the right location (Tenekecioglu et al., 2004: 8). Businesses use many tools for product and service promotion. Advertising, direct marketing, personal selling, and public relations are among the most important of these tools (Dalkıran, 2009: 47).

In line with business responsibilities, eco-labelling is also one of the methods used for informing consumers about the activities related to the production of goods and services. This method enables product differentiation without breaking the prohibitions imposed by the World Trade Organization. Eco-labelling also informs consumers about the development of a product during the production process (Başaran, 2007: 2-8).

As their responsibility to the environment, price is another method used by businesses to announce their products, services, and activities. Price influences customer preferences as an indicator of cost and quality (Gabor and Granger, 1966: 590). It is important to note that there is a cost of being an environmentalist and to healthy living style. The customers
must be properly told that their contribution to the cost through purchasing will save them from future irrevocable vital problems. For example, electricity-saving bulbs and fluorescents are preferred by consumers despite their high prices (Duru and Şua, 2013: 128).

Brand image is also a method for relaying information to customers about products, services, and activities (Kükrer, 2012: 4506). Environmental sensitivity does not just help a business to be competitive and increase its market share, it also increases customer loyalty (Porter and Van der Linde, 1995). Nowadays, more attention is given to green advertising, especially due to intense competition. It is the new face of competition.

**Social Media and Reference Groups**

It has been documented that mass media plays an important role in determining whether society will pay attention to the desired issues (Thøgersen, 2006: 145). Millions of people can be reached simultaneously or in a very short time. Considering that even wars start with social media tools (incitement of Arab spring with Twitter), social media is critical for protecting the environment. In his research Biswas (2016: 92-96) has found that social media factors positively affect the green choice behavior of consumers.

Consumers can exhibit their consumption-oriented behaviors based on economic, moral or other values (Özsungur and Güven, 2017: 132). For example, the concepts related to the protection of the environment, respecting living beings, and hygiene can be found in the Holy Quran and Prophet Mohammed’s (PBUH) sayings. Prophet Mohammed (BPUH) states that even if you know that the apocalypse will break, plant the sapling in your hand.” “Do not waste even if you receive ablution
from a running stream.” This hadith was even placed on the pet bottles by an Australian firm. According to Zastrow (2009), one of the factors that affect individual behavior and decision-making is reference groups. Individuals are under the influence of social groups within their social class. The socio-cultural characteristics of these groups, their reactions, the degree of proximity and distance to products motivate or ends the purchasing behavior (Cited by Özsungur and Güven, 2017: 134). Greenpeace is an example of these reference groups. Having thousands of followers, Greenpeace strives to make the world a better place, while affecting the behaviors of its followers.

**Green Trust**

Trust is one’s willingness to be vulnerable based on positive expectations about the actions and intentions of others (Cheung et al., 2015: 235). Trust is built on integrity, helpfulness, and competence (Singh and Sirdeshmukh, 2000: 151). Trust can be also defined as the efforts of human beings to save themselves from dangers, negative situations, and risks. This is not different in green marketing. Chen (2010) defines green trust as “a desire to trust a product, service or brand, depending on its reliability, goodness, and ability in environmental performance.”

Consumers want to be assured of various fears and risks when purchasing a product. There are certain physiological, psychological and economic risks as well as uncertainty related to performance, time, opportunity and social aspects for consumes. The physiological risk involves harm to one’s body. For example, harm to the body by the food consumed, the polluted air breathed, flooding caused by climate change and so on can be associated with green trust.
Consumers may think that the world will become a better place with the product they will purchase as a result of the communication efforts of the brand. In this case, it is possible to argue a psychological risk. Will the money I pay for the product make the world a better place?

When a consumer compares the price paid for a green product and the perceived value, the economic risk arises. Is the price I pay worth this product? Whether the green products fulfill the promised functions constitute the performance risk. If the world becomes a better place with green consumption, the risk is minimized. Time spent to obtain a green product is a risk. As a matter of fact, consumers must spend time on research, transportation, and so on to obtain green products. Finally, the hesitation of consumers whether a non-green product is preferable over a green product creates the opportunity risk. Does the non-green product show the same characteristics? Businesses need to concentrate on visuals, examples, videos and communication efforts to eliminate these risks.

If marketing practices are careful, honest and not misleading, they can find willing buyers in the green segment involving the target group (Shrum et al., 1995: 81). Clearly declaring the benefits through packaging or advertising can overcome negative perceptions and concerns on the effectiveness of an environmentally friendly product (Luchs, 2010: 28-29).

Chen et al. (2015) find that an environmentally friendly product can have three approaches to positively affect green trust. The first approach assumes that an environmentally friendly product can make a direct positive impact on green trust. The second approach argues that an environmentally friendly product can have an indirect positive impact on green trust. Finally, the last approach states that an environmentally friendly product can make an indirect positive impact on
green trust through perceived green quality. Businesses should increase green satisfaction and green perceived quality of their products to increase green trust. For example, Cheung, Lam and Lau in their research (2015) entitled “Drivers of Green Product Adoption: The Role of Green Perceived Value, Green Trust and Perceived Quality” indicate that the drivers of green product adoption are represented by green perceived value, green trust, and perceived quality. Moreover, Chen, Lin and Weng in their research (2015) “The Influence of Environmental Friendliness on Green Trust: The Mediation Effects of Green Satisfaction and Green Perceived Quality” finds that environmental friendliness has a significant positive impact on green satisfaction, perceived green quality, and green trust.

**Purchase Intention**

Ajzen’s Planned Behavior Theory (1991: 184-196) states that attitude toward behavior, subjective norms, and perceived behavioral control shape an individual’s behavioral intentions. The theory assumes that intention is the precursor of actual behavior. According to the planned theory of behavior, ultimately there is the availability or absence of necessary resources and opportunities between the intention and beliefs that determine the action. Green purchasing intention is “conceptualized as a possibility and willingness to choose products that have environmentally friendly properties compared to other traditional products” (Rashid, 2009: 134).

Instead of evaluating single factors, we need to consider all effective factors together to obtain a more realistic view of purchase intention for green products. Previous research has identified environmental factors contributing to consumer perception of green products. These factors are corporate
perception, corporate regulatory compliance, product labels, packaging and ingredients, consumer experience with a product, product price, and product quality (D’Souza et al., 2006: 145).

There are factors that affect consumers’ purchasing intentions. Some of those are as follows: Environmental concern (Lasuin and Ching, 2014; Joshi and Rahman, 2015 and Newton et al., 2015), awareness (Peberdy et al., 2019), perceived consumer effectiveness (Kabadayi et al., 2015; Heo and Muraidharan, 2017 and Razmi and Harun, 2019), personal attitude (Wang et al., 2019; Razmi and Harun, 2019), product function characteristics (Chang and Wildt, 1994; Joshi and Rahman, 2015), individual environmental awareness, social impact (Wang and Zhou, 2019), brand personality (Bian, 2006), perceived quality (D’Souza et al., 2007), green brand image and environmental advertising (Rizwan, 2014).

**Methodology**

The main aim of this research is to examine whether green trust has a mediating role in the effect of green product awareness on consumer purchase intention. The main problem is whether green product awareness affects purchase intention. In an intensely competitive environment, especially the global enterprises emphasize the characteristics of green products in communication efforts. In doing so, they attempt to minimize the risks that consumers face. In other words, they aim to reassure consumers. Another research problem is investigating the direct and indirect effect of green trust. Based on the literature review, the study has developed its hypotheses.
The research hypotheses based on the model presented above are as follows:

Major Research Hypothesis, $H_1$: “Green product awareness affects purchase intention.”

Sub-Hypothesis, $H_{1a,b,c,d}$: “As green product awareness dimensions a) environmental concern, b) environmental information, c) environmental promotion activities, and d) reference groups affect purchase intention.”

Major Research Hypothesis, $H_2$: “Green product awareness affects green trust.”

Sub-Hypothesis, $H_{2a,b,c,d}$: “As green product awareness dimensions a) environmental concern, b) environmental information, c) environmental promotion activities, and d) reference groups affect green trust.”

Major Research Hypothesis, $H_3$: “Green trust affects purchase intention”

Major Research Hypothesis, $H_4$: “Green Trust has a mediating role in the relationship between green product awareness and purchase intention.”
Sub-Hypothesis $H_{a,b,c,d}$: “Green product awareness has a mediating role in the relationship between green product awareness dimensions of ‘a) environmental concern, b) environmental information, c) green product promotion activities, d) reference groups’ and purchase intention.”

Research Population and Sampling

The research has used the 2017-2018 address-based census registration data of the Turkish Statistics Institution to determine the research population. Accordingly, the research population involves consumers living in the Çankaya district of Ankara province. The research investigating the mediating role of green trust in the relationship between green product awareness and purchase intention has used a quantitative methodology. The sampling method is convenience sampling as a type of non-random sampling. According to the census, registration records in 2017-2018, the population of Ankara province’s 5,503,985.

The sampling size for the study is specified by using Sekaran’s sample calculation table for a given population (2003). In line with the table, the sample size is 384 consumers within a 5% margin of error and a 95% confidence interval in Çankaya district with a population of 920,890. However, considering that some of the forms would be eliminated, the sample size was determined as 412 people in order to increase the representation power (Sekaran, 2003).

The application of the questionnaire was face to face. The participants were acknowledged about the goal, scope, and contribution of the research. Consumers who were willing to participate in the research answered the questions of the

questionnaire. Due to errors in filling the forms, 6 forms were not included in the analysis. SPSS package program was used in the analysis of the study.

**Data Collection Techniques**

The study has used a questionnaire for data collection. The first part of the questionnaire consists of demographic questions for getting to know the participants. The questions measuring the demographic characteristics of the participants are measured with nominal criteria. There are statements regarding green trust in the second part, purchase intention in the third part, and green product awareness in the fourth part of the questionnaire. A 5-point Likert scale is used in the evaluation of participant statements who were asked to choose one of the following expressions: 1- Strongly Disagree, 2- Disagree, 3- Undecided, 4- Agree and 5- Strongly Agree.

To determine the scales used in the study, a literature review was conducted. The questions of the questionnaire were determined after the literature research on green product awareness, green trust, and purchase intention. While preparing the questionnaire, the research used variables proven valid and reliable in the literature. The expressions in the scales were translated into Turkish and rearranged.
## Table 1. Questionnaire Development Process

<table>
<thead>
<tr>
<th>Factor</th>
<th>Dimension</th>
<th>Statement</th>
<th>Author</th>
<th>Title of the Research Paper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green Product Awareness</td>
<td>1.2.3.4.5.6.7.8.9. statements</td>
<td>Dunlop, Jones and Mertig (2000)</td>
<td>Measuring Endorsement of the New Ecological Paradigm: A Revised NEP Scale</td>
<td></td>
</tr>
<tr>
<td>Environmental Concern</td>
<td>10. statement</td>
<td>Siddique and Hossain (2018)</td>
<td>Sources of Consumers Awareness toward Green Products and Its Impact on Purchasing Decision in Bangladesh</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Suki (2013)</td>
<td>Green Awareness Effects on Consumers’ Purchasing Decision: Some Insights from Malaysia</td>
<td></td>
</tr>
<tr>
<td>Environmental Information</td>
<td>1.2.3.4. statements</td>
<td>Siddique and Hossain (2018)</td>
<td>Sources of Consumers Awareness toward Green Products and Its Impact on Purchasing Decision in Bangladesh</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5.6.7.8. statements</td>
<td>Cited by: Mohr, Eroğlu and Ellen (1998)</td>
<td>The Development and Testing of a Measure of Scepticism Toward Environmental Claims in Marketers’ Communications</td>
<td></td>
</tr>
<tr>
<td>Environmentally Friendly Products</td>
<td>1.2.3. statements</td>
<td>Siddique and Hossain (2018)</td>
<td>Sources of Consumers Awareness toward Green Products and Its Impact on Purchasing Decision in Bangladesh</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.2.3.4.5.6. statements</td>
<td>Siddique and Hossain (2018)</td>
<td>Sources of Consumers Awareness toward Green Products and Its Impact on Purchasing Decision in Bangladesh</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.2.3.4.5. statements</td>
<td>Siddique and Hossain (2018)</td>
<td>Sources of Consumers Awareness toward Green Products and Its Impact on Purchasing Decision in Bangladesh</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.2.3.4. statements</td>
<td>Cited by: Chan (2001)</td>
<td>Determinants of Chinese Consumers’ Green Purchase Behaviour</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.2.3.4.5. statements</td>
<td>Chen (2010)</td>
<td>Towards Green Loyalty: Driving from Green Perceived Value, Green Satisfaction, and Green Trust</td>
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</tr>
<tr>
<td></td>
<td>6.7. statements</td>
<td>Researcher</td>
<td>Determinants of Long-Term Orientation in Buyer-Seller Relationships</td>
<td></td>
</tr>
<tr>
<td></td>
<td>8. statement</td>
<td>Siddique and Hossain (2018)</td>
<td>Sources of Consumers Awareness toward Green Products and Its Impact on Purchasing Decision in Bangladesh</td>
<td></td>
</tr>
</tbody>
</table>
Findings and Interpretations

Demographic Findings

The questionnaire has been applied to 406 consumers. As revealed by Table 2, the frequency and percentage of both male and female participants in Çankaya district of Ankara province are close to each other. As males represent 49.8% of the participants, women are accounted 50.2% of all consumers in the sample.

<table>
<thead>
<tr>
<th>Demographic Characteristics</th>
<th>Groups</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>202</td>
<td>%49.8</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>204</td>
<td>%50.2</td>
</tr>
<tr>
<td>Age Group</td>
<td>18-28</td>
<td>221</td>
<td>%54.4</td>
</tr>
<tr>
<td></td>
<td>29-39</td>
<td>83</td>
<td>%20.4</td>
</tr>
<tr>
<td></td>
<td>40-50</td>
<td>55</td>
<td>%13.5</td>
</tr>
<tr>
<td></td>
<td>51 and above</td>
<td>47</td>
<td>%11.6</td>
</tr>
<tr>
<td>Marital Status</td>
<td>Married</td>
<td>154</td>
<td>%37.9</td>
</tr>
<tr>
<td></td>
<td>Single</td>
<td>252</td>
<td>%62.1</td>
</tr>
<tr>
<td>Educational Status</td>
<td>Primary/Middle School Deg.</td>
<td>29</td>
<td>%7.1</td>
</tr>
<tr>
<td></td>
<td>High School Degree</td>
<td>91</td>
<td>%22.4</td>
</tr>
<tr>
<td></td>
<td>Associate Degree</td>
<td>71</td>
<td>%17.5</td>
</tr>
<tr>
<td></td>
<td>Bachelor’s Degree</td>
<td>190</td>
<td>%46.8</td>
</tr>
<tr>
<td></td>
<td>Master’s/Doctorate</td>
<td>25</td>
<td>%6.2</td>
</tr>
<tr>
<td>Occupation</td>
<td>Civil Servant</td>
<td>65</td>
<td>%16.0</td>
</tr>
<tr>
<td></td>
<td>Student</td>
<td>115</td>
<td>%28.3</td>
</tr>
<tr>
<td></td>
<td>Craftsman/Tradesman</td>
<td>23</td>
<td>%5.7</td>
</tr>
<tr>
<td></td>
<td>Unemployed/job seeking</td>
<td>28</td>
<td>%6.9</td>
</tr>
<tr>
<td></td>
<td>Retired</td>
<td>29</td>
<td>%7.1</td>
</tr>
<tr>
<td></td>
<td>Labourer</td>
<td>57</td>
<td>%14.0</td>
</tr>
<tr>
<td></td>
<td>Housewife</td>
<td>14</td>
<td>%3.4</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>75</td>
<td>%18.5</td>
</tr>
<tr>
<td>Income (TL)</td>
<td>2000 and below</td>
<td>156</td>
<td>%38.4</td>
</tr>
<tr>
<td></td>
<td>2001-3000</td>
<td>101</td>
<td>%24.9</td>
</tr>
<tr>
<td></td>
<td>3001-4000</td>
<td>62</td>
<td>%15.3</td>
</tr>
<tr>
<td></td>
<td>4001-5000</td>
<td>50</td>
<td>%12.3</td>
</tr>
<tr>
<td></td>
<td>Above 5000</td>
<td>37</td>
<td>%9.1</td>
</tr>
</tbody>
</table>
When marital status considered, 37.9% of the participants are married. When the participant age groups are examined, the 18-28 age group has the highest percentage, which is 54.4%. Another question of demographic characteristics is related to the educational status of the participants. The research has found that 7.1% of the participants have primary and secondary school degrees, 22.4% of the participants have high school degrees, 17.5% of the participants have associate degrees, 46.8% of the participants have undergraduate degrees, and 6.2% of the participants are students at or have degrees from master’s and doctorate programs. Table 2 indicates highly educated participants. This high education status is important for participants’ understanding of the statements in the questionnaire. The distribution of occupations involves 16% civil servants, 28.3% students, 14% labourers, 7.1% retired, 6.9% unemployed/job-seeking individuals, 5.7% craftsmen/tradesmen, and 3.4% housewives. The rest of the participants, which is 18.5%, belong to other occupational groups. The last question of demographic characteristics is about the income levels of the participants. Table 2 indicates that 38.4% of the participants earn 2000 or less, while 25% of the respondent shave income between TL 2001- TL 3000. Moreover, the participants with income between TL 3001- TL 4000 are 15.3% of the research sample followed by 12.3% of people earning between TL 4001- TL 5000. Finally, the remaining 9.1% of the participants make monthly incomes above TL 5000.

We can conclude from a general analysis of Table 2 that 74.8% of the participants are in the age groups of 18-28 and 29-39, as more than half of the respondents are singles. The education level of participants is considerably high. When the occupations are analyzed, student participation percentage is higher than others. The study has not created any categories among participants since it uses a convenience sampling method.
The students going through a similar research process developed a more positive attitude to be involved in the research. That’s why the percentage of students and singles in the sample is higher than in other groups.

**Green Product Awareness Factor Analysis**

The research has conducted an explanatory factor analysis based on the data that formed the perceptions of participants about green product awareness.

**Table 3. Green Product Awareness Factor Analysis**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Statements</th>
<th>Factor Loadings</th>
<th>Explained Variance</th>
<th>Eigenvalue</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Green product awareness increases with advertising including messages about environmentally friendly products.</td>
<td>.747</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Green product labels are a good source of information for consumers.</td>
<td>.732</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sharings in social media on Environmentally friendly products increases green product awareness.</td>
<td>.654</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Environmentally friendly products are beneficial for the environment as well as for health.</td>
<td>.652</td>
<td>14.538</td>
<td>7.631</td>
</tr>
<tr>
<td></td>
<td>Businesses using their own brands and environmental groups together increase awareness about environmentally friendly products</td>
<td>.612</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Minimal environmental pollution is considered in the production stages of environmentally friendly products.</td>
<td>.596</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Promoting environmentally friendly products is sufficient information to purchase them.</td>
<td>.534</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Environmentally friendly products are useful.</td>
<td>.509</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Environmental Concern

- Environmental pollution is a serious problem. 672
- Consumers should be informed about environmental problems. 660
- Humans are severely abusing the environment 647
- Living beings in nature (plants and animals) have as much right as humans to exist. 633
- For a more liveable world, environmental sensitivity should increase. 629
- When humans interfere with nature it often produces bad consequences 617
- If we don’t learn how to improve our natural resources, the world’s limited natural resources will come to an end. 570
- The things made by human beings make the world unliveable. 551
- Consumers should refrain from buying non-recyclable products. 508
- Modern industry disrupts the balance of nature. 473

Environmental Information

- I know which products do not harm the environment. 831
- I know which packaging does not harm the environment. 817
- I know how to choose the products for consumption with least amount of waste. 800
- I understand the environmental statements and symbols on the product packaging. 689
- I used environmentally friendly products in the past. 457
Factor analysis findings for the green product awareness scale in Table 3 shows that KMO sample adequacy is 0.891, while the Barlett test result is significant ($p < 0.000$). The research findings for green product awareness also indicate a Cronbach’s Alpha coefficient of 0.902 measured through 34 questions. Based on the results, it can be concluded that the reliability of the research is quite high. In conducting the factor analysis for green product awareness, the research has used principal component analysis and Varimax rotation technique. Values with low equivalence have been excluded from the scale. Accordingly, questions 1, 2, 9, 14, 16 and 34 in the scale have been omitted because they show low equivalence. After the removal of these questions, 28 statements remained. The research has identified four dimensions from the remaining statements, as shown in Table 3. According to the factor analysis results, the first factor consists of 8 items, the second factor consists of 10 items, the third factor consists of 5 items and the fourth factor consists of 5 items. As seen in Table 3, the factor loadings vary between 0.747 and 0.509 for the first factor. Since the
related questions measure consumer’s purchase intention as a result of promotion activities for green products, this factor is called “Green Product Promotion Activities.” The factor loadings for the second factor vary between 0.672 and 0.473. Since the values in the questionnaire are for measuring the concerns of consumers, this factor is called “environmental concern.” The factor loadings for the third factor vary between 0.831 and 0.457. Since the statements in the questionnaire measure consumer information regarding green products, this factor is called “environmental information.” Finally, the fourth factor’s factor loadings vary between 0.798 and 0.501. Since the research measures the reference groups influencing consumers for purchasing green products, this factor is called “reference groups”. When Table 3 is examined, it is seen that the total explained variance regarding green product awareness is 51.337%. This means that four factors together explain more of the latent structure. When the distribution of eigenvalues and variances is examined, the first factor has the highest eigenvalue of 7.631 and the explained variance of 14.538%. The second factor has the second-highest eigenvalue of 3.106 and the explained variance of 14.024%. Moreover, the third-highest eigenvalue of 2.137 and the variance of 11.824% belong to the third factor. Finally, it is the fourth factor with a minimum eigenvalue of 1.500 and a variance of 10.952%.

**Purchase Intention Factor Analysis**

The study has conducted explanatory factor analysis on the data that formed the participants’ perceptions about purchase intention.
Table 4. Purchase Intention Factor Analysis

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Statements</th>
<th>Factor Loadings</th>
<th>Explained Variance</th>
<th>Eigenvalue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase Intention</td>
<td>I will consider switching to brands with green labels to protect the environment.</td>
<td>0.883</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>I will consider buying environmentally friendly products for they try to minimize environmental pollution.</td>
<td>0.880</td>
<td>75.426</td>
<td>3.017</td>
</tr>
<tr>
<td></td>
<td>From the products, I consume, I plan to switch to the environmentally friendly ones.</td>
<td>0.859</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>I will consider buying environmentally friendly products for they are beneficial to the environment.</td>
<td>0.851</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Evaluation Criteria: Kaiser-Meyer-Olkin Measure of Sampling Adequacy: 0.796
Approx. Chi-Square: 967.070 Bartlett’s Test of Sphericity: 0.000
Extraction Method: Principal Components Rotation Method: Varimax
Cronbach’s Alpha: 0.890

The results of the factor analysis for the purchase intention scale in Table 4 shows that KMO sample adequacy is 0.796, as the Barlett test result is significant (p<0.000). The Table also shows the reliability analysis result for purchase intention. Accordingly, the Cronbach’s Alpha coefficient is 0.890 indicating quite high reliability of the research.

The study has used principal component analysis and Varimax rotation technique. The findings of the factor analysis indicate that the purchase intention factor consists of four items. As seen from Table 4, the factor loadings range between 0.883 and 0.851. Additionally, the total explained variance for
purchase intention is 75.426%. This means that the emerged factor explains most of the variance. Finally, findings indicate an eigenvalue of 3.017 for the factor. Since the statements in the questionnaire measure information about consumer purchase intention, the factor is entitled “purchase intention.”

**Green Trust Factor Analysis**

Explanatory factor analysis has been conducted on the data that formed the participants’ perceptions about green trust.

**Table 5. Green Trust Factor Analysis**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Statements</th>
<th>Factor Loadings</th>
<th>Explained Variance</th>
<th>Eigenvalue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green Trust</td>
<td>Environmentally friendly products protect the environment</td>
<td>.777</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Environmentally friendly products do not make false claims to protect the environment.</td>
<td>.758</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Environmentally friendly products eliminate our concerns.</td>
<td>.756</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>The impression made by environmentally friendly products is generally trustworthy.</td>
<td>.754</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>The functions of environmentally friendly products offered to consumers are generally reliable.</td>
<td>.730</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Environmentally friendly products do not mislead when informing consumers.</td>
<td>.730</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Environmentally friendly products promise to make our country better.</td>
<td>.692</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Environmentally friendly products make the environment more liveable.</td>
<td>.674</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Evaluation Criteria: Kaiser-Meyer-Olkin Measure of Sampling Adequacy: 0.877
Approx. Chi-Square: 1407.717 Bartlett’s Test of Sphericity: 0.000
Extraction Method: Principal Components Rotation Method: Varimax Cronbach's Alpha: 0.877
The findings of the factor analysis for green trust scale in Table 5 indicates that KMO sample adequacy is 0.877, while the test result is significant (p<0.000). The Cronbach’s alpha coefficient measured with 8 questions is 0.877 as illustrated in the Table. This finding indicates that the reliability of the research is quite high.

The study has used principal component analysis and varimax rotation technique for factor analysis of green trust. According to the results of the analysis, green trust factor consists of 8 items. Table 5 also indicates the factor loadings are between 0.777 and 0.674. Additionally, the total explained variance and Eigenvalue are 53.998% and 4.320, respectively.

Correlation Analysis Related to Green Product Awareness, Purchase Intention, and Green Trust

Once the reliability of factors is determined, the research has conducted correlation analysis to reveal the relations between the factors in the model.

Table 6. Correlation Analysis

<table>
<thead>
<tr>
<th>Factors</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Green Product Promotion Activities</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Environmental Concern</td>
<td>.400**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Environmental Information</td>
<td>.441**</td>
<td>.300**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Reference Groups</td>
<td>.464**</td>
<td>.263**</td>
<td>.535**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Purchase Intention</td>
<td>.559**</td>
<td>.321**</td>
<td>.356**</td>
<td>.463**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>6. Green Trust</td>
<td>.487**</td>
<td>.167**</td>
<td>.215**</td>
<td>.267**</td>
<td>.522**</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 6 indicates that there are low/moderate significant positive relations between green product awareness, purchase intention and green trust. When purchase intention is considered,
there is a moderate positive meaningful relationship between it and green product promotion activities, environmental concern, environmental information and reference groups. Table 6 also indicates that green trust has a low and positive relationship with the following three dimensions of green product awareness; environmental concern, environmental information, and reference groups. However, green trust has a moderate and positive relationship with green product promotion activities, which is the fourth dimension of green product awareness.

Multiple Linear Regression Analysis for Green Product Awareness Dimensions and Purchase Intent

The research has also conducted multiple linear regression analysis to examine the effects of green product awareness dimensions over purchase intention.

### Table 7. Multiple Linear Regression Analysis for Green Product Awareness Dimensions and Purchase Intention

<table>
<thead>
<tr>
<th>Variables</th>
<th>B</th>
<th>Std. Error</th>
<th>Beta</th>
<th>T</th>
<th>P</th>
<th>Tol.</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>.929</td>
<td>.273</td>
<td></td>
<td>3.400</td>
<td>.001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Green Product Promotion Activities</td>
<td>.465</td>
<td>.056</td>
<td>.401</td>
<td>8.304</td>
<td>.000</td>
<td>.671</td>
<td>1.491</td>
</tr>
<tr>
<td>Environmental Concern</td>
<td>.130</td>
<td>.063</td>
<td>.090</td>
<td>2.072</td>
<td>.039</td>
<td>.820</td>
<td>1.219</td>
</tr>
<tr>
<td>Environmental Information</td>
<td>.020</td>
<td>.041</td>
<td>.024</td>
<td>.484</td>
<td>.629</td>
<td>.657</td>
<td>1.523</td>
</tr>
<tr>
<td>Reference Groups</td>
<td>.200</td>
<td>.041</td>
<td>.240</td>
<td>4.882</td>
<td>.000</td>
<td>.648</td>
<td>1.543</td>
</tr>
</tbody>
</table>

Dependent Variable: Purchase Intention

R: 0.610  R²: 0.373  F: 59.535  p: 0.000  Durbin-Watson: 1.890

When Table 7 is examined, we see that R-value is 0.610. There is a moderate and positive relationship between the dependent variable purchase intention and green product
awareness dimensions such as green product promotion activities, environmental concern, and environmental information and reference groups. The Table indicates that the independent variables explain 37.3% of the total variance in the dependent variable. In other words, we can conclude that green product promotion activities, environmental concern, environmental information and reference groups have 37.3%. Estimation accuracy in predicting consumer purchase intention.

According to the model, three out of four independent variables, green product promotion activities ($p = 0.000$), environmental anxiety ($p = 0.039$) and reference groups ($p = 0.000$) are statistically significant. The research has not found any multicollinearity between independent variables since there is not any VIF value above 10 and a tolerance value below 0.20. In addition, the Durbin-Watson coefficient (1.890) shows that there is not any problematic relationship between independent variables and error terms. Therefore, we can conclude that the three green product awareness dimensions; green product promotion activities, environmental concern and reference groups affect the dependent variable, purchase intention. Therefore, these three independent variables require attention from practitioners and researchers.

Based on the findings the following hypothesis is accepted:

**H1a,c,d** "As green product awareness dimensions a) environmental concern, c) environmental promotion activities and d) reference groups affect purchase intention. Based on the findings the following hypothesis is accepted:

**H1a,c,d** "As green product awareness dimensions a) environmental concern, c) environmental promotion activities and d) reference groups affect purchase intention."

Multiple Linear Regression Analysis for Green Product Awareness Dimensions and Green Trust
The study has conducted multiple linear regression analysis to examine the effect of green product awareness dimensions on green trust.

**Table 8. Multiple Linear Regression Analysis for Green Product Awareness Dimensions and Green Trust**

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>Std. Error</th>
<th>Beta</th>
<th>t</th>
<th>P</th>
<th>Tol.</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>1.348</td>
<td>.333</td>
<td>4.048</td>
<td>.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Green Product Promotion Activities</td>
<td>.617</td>
<td>.068</td>
<td>.481</td>
<td>9.047</td>
<td>.000</td>
<td>.671</td>
<td>1.491</td>
</tr>
<tr>
<td>Environmental Concern</td>
<td>-.057</td>
<td>.076</td>
<td>-.036</td>
<td>-.752</td>
<td>.452</td>
<td>.820</td>
<td>1.219</td>
</tr>
<tr>
<td>Environmental Information</td>
<td>-.018</td>
<td>.050</td>
<td>-.020</td>
<td>-.364</td>
<td>.716</td>
<td>.657</td>
<td>1.523</td>
</tr>
</tbody>
</table>

Dependent Variable: Green Trust

\[ R = 0.491 \]
\[ R^2 = 0.241 \]
\[ F(4,405) = 31.791 \]
\[ p = 0.000 \]

Durbin-Watson: 1.649

When Table 8 analysed, we see a R value of 0.49. It means a moderate positive relationship between the dependent variable green trust and green product awareness dimensions such as green product promotion activities, environmental concern, environmental information, and reference groups. As indicated by the Table, we can say that the independent variables explain 24.1% of the total variance in the dependent variable, green trust. In other words, we can conclude that green product promotion activities, environmental concern, environmental information and reference groups has 24.1% estimation accuracy in predicting green trust.

According to the model, out of four independent variables, only green product promotion activities is statistically significant \((p=0.000)\). There is also not any multi collinearity between
independent variables since there are not any VIF value above 10 and any tolerance value below 0.20, as shown in the Table 8. Furthermore, Durbin-Watson coefficient value of 1.649 indicates that there is not any problematic relationship between independent variables and error terms.

**Based on the findings the following hypothesis is accepted:**

\( H_2c \) “As a green product awareness dimension, c) environmental promotion activities affects green trust”

Simple Linear Regression Analysis for Green Trust and Purchase Intention

The research has applied simple linear regression analysis to examine the effect of green trust on purchase intention.

**Table 9. Simple Linear Regression Analysis for Green Trust and Purchase Intention**

<table>
<thead>
<tr>
<th>Model</th>
<th>Purchase Intention</th>
<th>Non-standardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>Constant</td>
<td></td>
<td>2.459</td>
<td>.147</td>
</tr>
<tr>
<td>Green Trust</td>
<td></td>
<td>.471</td>
<td>.038</td>
</tr>
<tr>
<td>R =0.522</td>
<td>R² =0.272</td>
<td>F=151.010</td>
<td>p=0.000</td>
</tr>
</tbody>
</table>

Table 9 shows a R value of 0.522. Based on this value, there is a moderate and positive relationship between green trust and purchase intention. When the Table is examined, the independent variable explains 27.2% of the variance in the dependent variable. In other words, consumer trust in green
products help predict the customer purchase intention with an accuracy of 27.2%.

The research has used Anova test to analyse whether the regression model is significant. Since the significance level corresponding to F value from the Anova test is less then $p < 0.05$ ($p = 0.000$), the model is statistically significant. Based on this finding, it can be said that the model created has an important contribution in explaining the dependent variable. Furthermore, Durbin-Watson coefficient (1.777) shows that there is not any problematic relationship between the independent variable and error terms.

**Based on the analysis explained above the following hypothesis is accepted.**

$H_3$: “Green trust affects purchase intention.”

Hierarchic Regression Analysis

The regression analysis proposed by Baron and Kenny (1986) has been conducted to determine the mediating role of green trust in the relationship between green product awareness and purchase intention. The model proposed by Baron and Kenny (1986) requires some steps to be performed in order to accept the role of the mediation variable.

The first step is the significant effect of the independent variable on the dependent variable. As displayed in Table 7, independent variables, green product promotion activities, environmental concern and reference groups have a significant effect ($p < 0.05$) on purchase intention.

The second step is the significant effect of the independent variable on the mediating variable. As shown by Table 8, there is a significant effect of the green product awareness dimension, green product promotion activities, on green trust ($p < 0.05$).
The third step should involve a significant effect of the mediating variables on the dependent variable. When Table 9 is examined, we see a significant effect between green trust and purchase intention (p <0.05).

Finally, when the mediating variable is included in the model with the independent variable, the effect of the independent variable on the dependent variable should decrease, while the effect of the mediating variable on the dependent variable is significant. The research has performed a hierarchical regression analysis to test this step. The results are shown in Table 10.

Table 10. Hierarchic Regression Analysis

<table>
<thead>
<tr>
<th>Model</th>
<th>Factors</th>
<th>B</th>
<th>Std. Deviation</th>
<th>Beta</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Green Product Promotion Activities</td>
<td>.47</td>
<td>.06</td>
<td>.40**</td>
<td>.37</td>
</tr>
<tr>
<td></td>
<td>Environmental Concern</td>
<td>.13</td>
<td>.06</td>
<td>.09*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Environmental Information</td>
<td>.02</td>
<td>.04</td>
<td>.02</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reference Groups</td>
<td>.20</td>
<td>.04</td>
<td>.24**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Constant</td>
<td>.93</td>
<td>.27</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Green Product Promotion Activities</td>
<td>.29</td>
<td>.06</td>
<td>.25**</td>
<td>.08</td>
</tr>
<tr>
<td></td>
<td>Environmental Concern</td>
<td>.15</td>
<td>.06</td>
<td>.10*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Environmental Information</td>
<td>.03</td>
<td>.04</td>
<td>.03</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reference Groups</td>
<td>.18</td>
<td>.04</td>
<td>.22**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Green Trust</td>
<td>.29</td>
<td>.04</td>
<td>.32**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Constant</td>
<td>.54</td>
<td>.26</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p<0.05       **p<0.01     Dependent Variable: Green Trust

In the hierarchical regression analysis, green product awareness dimensions (green product promotion activities, environmental concern, environmental information and reference groups) are first included, as seen from Table 10. These variables explain 37% of the variance related to the purchase intention variable. There is a positive relationship
between green product awareness dimensions and purchase intention. When the relationship between each dimension and purchase intention is considered, we see a statistically significant relationship between purchase intention and green product promotion activities, environmental concern and reference groups \((p < 0.05 \text{ and } p < 0.01)\). However, there is not any statistically significant relationship between purchase intention and environmental information \((p > 0.05)\).

Following the inclusion of green product awareness dimensions as explained above, the research has added green trust mediating variables in the hierarchic regression analysis, as indicated in Table 10. Accordingly, the green trust variable makes an additional 8% contribution to the previously calculated explained variance in the purchase intention variable. Thus, the explained variance has reached 45%. Moreover, the analysis also shows that there is a statistically significant positive relationship between green trust and purchase intention \((p < 0.01)\). Accordingly, as green trust increases purchase intention increases.

As seen from Table 10, the inclusion of green trust in the analysis has made a significant effect on the relationship between purchase intention and the two dimensions of green product awareness such as green product promotion activities and reference groups \((\text{Beta } = 0.25 \text{ and Beta } = 0.22 \ p < 0.05)\). Accordingly, the effects of both variables on the dependent variable have decreased. In light of these findings, we can conclude that green trust has a partial mediating role in the effects of green product promotion activities and reference groups on purchasing intention. However, the research has not found any mediating role of green trust in the effects of environmental concern and environmental information on purchase intention.
Based on the findings above the following hypothesis is accepted:

$H_{4c,d}$: “Green product awareness has a mediating role in the relationship between ‘c) green product promotion activities, d) reference groups’ and purchase intention.”

**Conclusions and Recommendations**

**Descriptive Conclusions**

Based on the descriptive statistics, the answers of the participants are evaluated in this section. The findings are based on the opinions of consumers aged 18 and over who reside in Çankaya district of Ankara.

The first five statements of the participants about green trust are as follows:

- Environmentally friendly products protect the environment,
- Environmentally friendly products make the environment more liveable.
- Environmentally friendly products promise to make our country better.
- The impression made by environmentally friendly products is generally trustworthy.
- The functions of environmentally friendly products offered to consumers are generally reliable.
The first five statements of participants regarding green product awareness are as follows:

- Living beings in nature (plants and animals) have as much right as humans to exist.
- Environmental pollution is a serious problem.
- For a more liveable world, environmental sensitivity should increase.
- Consumers should be informed about environmental problems.
- If we don’t learn how to improve our natural resources, the world’s limited natural resources will come to an end.

Based on the responses of participants on purchase intention, we can conclude that consumers consider buying environmentally friendly products, because they try to minimize environmental pollution and beneficial to the environment.

**Exploratory Results**

When the results of correlation analysis between green product awareness and green trust are examined, the research indicates that green trust has a low and positive relationship with green product awareness dimensions such as environmental concern, environmental information and reference groups. Additionally, green trust has a moderate and positive relationship with another dimension, green product promotion activities.

The correlation analysis results related to green product awareness and purchase intention reveals that there is a moderate positive meaningful relationship between purchase intention and each of the four dimensions of green product awareness such as green product promotion activities, environmental concern, environmental information and reference groups.
The studies in literature also show a relationship between green product and purchase intention (Alwitt and Pitts, 1996; Ramayah et al., 2010; Yaacob and Zakaria, 2011; Suki, 2013; Agyeman, 2014; Suki, 2016).

The multiple linear regression to analyze the effect of green product awareness on purchase intention indicates that the most important dimensions affecting the purchase intention are reference groups and green product promotion activities. The studies in the literature also have similar results (Kong et al., 2014; Kumar and Ghodeswar, 2014).

The simple linear regression to analyze the effect of green trust on purchase intention shows that green trust has a moderate positive significant effect on purchase intention. Similar findings of literature support this finding (Chen and Chang, 2012; Punyatoya, 2014; Lien et al., 2015).

The study has conducted a hierarchical regression analysis to examine whether green trust plays a mediating role in the effect of green product awareness on purchase intention. The results indicate that green trust has a partial mediating role in the effects of green product promotion activities and reference groups on purchasing intention, while it does not have any significant mediating role in the effects of environmental concern and environmental information on purchase intention. Additionally, green trust affects purchase intention. As the three dimensions of green product awareness, ‘green product promotion activities, environmental concern, reference groups’ affect purchase intention, this influence still continue once green trust variable is included in the model. Moreover, with its inclusion, the beta values for green product promotion activities and reference groups decrease. Based on these results, we can conclude that green trust has a partial mediating role in the relationship between purchase intention and the two
dimensions of green product awareness such as green product promotion activities and reference groups.

**Recommendations for the Practitioners**

The research reveals that consumers’ perception of trust towards green products is weak. Therefore, it is necessary for those concerned to gain the trust of consumers and take steps to protect the environment. Accordingly, strategies around green products must be developed by handling the risks faced by consumers one by one. In this context, consumers should be introduced eco-labels while necessary support is given to green products. Moreover, promotion activities must be increased, while measures are taken against misleading green advertisements. One of the major mistakes made in communication efforts is portraying non-environmentalists as normal citizens. In this case, a perception implying a “good, moral, family person” can pollute the environment is formed. Such a perception normalizes polluting the environment. This can change if social groups through communication activities indicate that the pollution of the environment is not acceptable by society. For example, if it is shown that polluting individuals are punk characters, people may rethink before throwing waste into the environment. Interestingly, it is possible to see the same wrong strategy at the public spot adds related to the hazards of smoking. Actors who say that smoking is bad in public spots shown in roles such as married, with children, elderly sitting in the sea view and so on. This wrong strategy creates a perception that such nice people can smoke. Instead, if smoking is presented as a habit of bad people, a better perception against the use of cigarettes can be formed. Therefore, the same logic can be adopted in the communication efforts regarding green product use.
Recommendations for Future Research

This study includes only the Çankaya district of Ankara province because of the time limitation and large universe. Thus, the results of the study cannot be generalized to Ankara Province and Turkey. Future research can expand the sampling by involving other provinces beside Ankara for obtaining more comprehensive information.

This research has developed a mixed scale based on the studies of Suki (2013), Siddique and Hossain (2018) and Dunlop, Jones and Mertig (2000). Therefore, further research can also benefit from different scales.

The study has also examined the effect of green product awareness on purchasing intention. Future research can analyze the effect of green product awareness on perceived green risk, perceived value, and perceived green quality. Moreover, this study has focused on the mediating effect of green trust in the relationship between green product awareness and purchase intention. The studies that will be conducted after this research can focus on the mediating roles of misleading green advertising practices, green advertising, and green satisfaction. Finally, the analysis of the relationship between green advertisement applications and brand hatred can be analyzed by further research.
A Green World, A Green Consumption

References


Stokes, S. A. (2009). *Deception In Environmental Advertising: Consumers’ Reactions to Greenwashing* (Master OfScience). Kansas State University, Department of Journalism and Mass Communications College of Arts and Sciences, Manhattan, Kansas.


A Research Review of Turkey’s International Logistics Trade Performance Comparison

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Murat ÖZTÜRK²
Ömer Nasuhi ŞAHİN³

Abstract

The concept of logistics, which is becoming more and more important for nearly a century, has been started to be dealt with internationally especially as a result of the endpoint of globalization and international trade. In this study, Turkey’s international logistics trade performance is discussed. In the study, first of all, the basic scales of the logistics development and logistics performance measurement scales are discussed. After this, Turkey’s logistics performance in comparison with other countries is examined. Finally, the findings of the research were shared.

Keywords: Logistics Performance, International Logistics, Turkey’s Logistics Performance

JEL Codes: N70, M16

Introduction

The increasingly globalized appearance of international trade has made the existence and efficiency of logistics systems even
more important. In other words, logistics and foreign trade make a significant contribution to the development level of the countries by supporting each other. Logistic performance is also an indicator of civilization for countries that provide this combination.

The focus of this study is to investigate the relationship between logistic performance and international trade in comparative terms in terms of successful countries in LPI (Logistics Performance Index). Transport and logistics services facilitate international trade and play an important role in the growth and development of the local economy. Also, globalisation and increasing competitiveness have led logistics to become a key element in foreign trade. Moreover, applying logistics activities based on performance; increases service efficiency, quality, safety and speed and facilitates the mobility of products. So, poor logistics infrastructure, slow logistics flow and low quality and efficiency in logistics services are seen as a major obstacle to integrating global trade.

**The Concept of Logistics**

Logistics is a set of activities that help manage all kinds of products, information and money flows in the process from production to consumption point (Lambert et al., 1998: 2). The concept of logistics has entered the economic literature since the 1960s. As the share of transportation costs in total costs came to the forefront, firms turned to efforts to realize their activities with less cost and better; transport, storage and distribution began to give importance to the control (Bayraktutan, Ozbilgin, 2016: 96).

Logistics activities include transportation, pre-transport information flow between the exporting country and the company
and the importing country and the company, communication channels and post-transport storage operations (Vallee, 2011: 82).

The total volume of logistics activities in Turkey, according to estimates, is approximately 30 billion US dollars. The total turnover of enterprises operating in the logistics sector is estimated to be between 6-10 billion US dollars (The most accepted estimate is 7 billion US dollars). Moreover, the contribution of the logistics sector to the GNP is estimated to be 12 billion USD and its employment is over 1.5 million people. These values clearly show the importance of the sector for the Turkish economy. Also, if the logistics base of the geography in Turkey will increase significantly contribute to the national economy, including employment particularly clearly shows (Gurdal, 2006: 48).

But; there are still companies that consider logistics only as a transportation or distribution process and perform their services to this extent. Likewise, some service users also evaluate logistics in this way.

### Table 1. Historical Development of Logistics

<table>
<thead>
<tr>
<th>Steps</th>
<th>Headquarters</th>
<th>Organizational Design</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1960s</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Storage and Transportation</td>
<td>Sales and Marketing,</td>
<td>Scattered logistics activities</td>
</tr>
<tr>
<td></td>
<td>Storage,</td>
<td>Poor linkage between logistics activities</td>
</tr>
<tr>
<td></td>
<td>Inventory Control,</td>
<td>Low logistics management authority</td>
</tr>
<tr>
<td></td>
<td>Transportation Efficiency</td>
<td>Supports business success</td>
</tr>
<tr>
<td><strong>1980s</strong></td>
<td>Centralization of logistics</td>
<td>Centralized logistics activities</td>
</tr>
<tr>
<td>Total Cost Management (TCM)</td>
<td>Total cost management</td>
<td>Growing logistics management authority</td>
</tr>
<tr>
<td></td>
<td>Process optimization</td>
<td>Computer applications</td>
</tr>
<tr>
<td></td>
<td>Logistics as a competitive advantage</td>
<td></td>
</tr>
<tr>
<td>1990s</td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------------</td>
<td>--------------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>Integrated Logistics Management (ILM)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Logistics planning</td>
<td>Expansion of logistics activities</td>
<td></td>
</tr>
<tr>
<td>Supply chain strategies</td>
<td>Supply chain planning</td>
<td></td>
</tr>
<tr>
<td>Integration with business activities</td>
<td>Support for total quality management</td>
<td></td>
</tr>
<tr>
<td>Integration with process channels</td>
<td>Logistics management activities</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2000s</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Supply Chain Management (SCM)</strong></td>
<td></td>
</tr>
<tr>
<td>Strategic supply chain vision</td>
<td>Commercial partnership</td>
</tr>
<tr>
<td>Use of extranet technology</td>
<td>Virtual organization</td>
</tr>
<tr>
<td>Cooperation in supply chain TQM indicators to use channel forces as a common force tool</td>
<td>Changes in demand</td>
</tr>
<tr>
<td>Strategic supply chain vision</td>
<td>Benchmarking and restructuring</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2000 and After</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>E- Supply Chain Management</strong></td>
<td></td>
</tr>
<tr>
<td>Application of SCM concept to internet</td>
<td>Partnering with the supply chain network</td>
</tr>
<tr>
<td>Low-cost instant database sharing</td>
<td>.com, -e plugin and so on. market changes</td>
</tr>
<tr>
<td>Electronic information</td>
<td>Organizational agility and measurability</td>
</tr>
<tr>
<td>SCM synchronization</td>
<td></td>
</tr>
</tbody>
</table>


**Logistics Performance**

Since 2007, the World Bank has been evaluating the countries’ logistic performances within the framework of 7 different criteria and scoring them under the name International Logistics Performance Index. These criteria are customs, infrastructure, international shipment, quality of logistics services, tracking and traceability of shipments, and finally the timely delivery of shipments. The global logistics performance of the countries...
was measured on the basis of 7 criteria. The seven performance areas identified for this research are as follows (World Bank, 2007: 8):

- The efficiency of the transactions carried out by customs and other border agencies,
- Logistic quality of infrastructure related to transportation and information technologies,
- The ease and cost of arranging international shipments,
- Competence of the local logistics sector,
- Ability to track international shipments,
- Domestic logistics costs,
- Timely access of shipments to the destination.

In the study, titled “Connecting to Compete-Trade Logistics in the Global Economy” published by the World Bank and containing the “Global Logistics Performance Index and Indicators”, 6 criteria were developed to measure the logistical performance of the countries and their status on logistics was determined. The six criteria of LPI are listed below (The World Bank, http://lpi.worldbank.org);

- Effectiveness of customs and border crossing permits (Customs),
- Quality of trade and transport infrastructure (Infrastructure)
- Ease of setting competitive pricing in international transport (International transport)
- Competence and quality of logistics services (Logistics competence)
- Shipment and tracking ability (Freight tracking)
- Time of delivery of the delivered or expected delivery to the required point (Schedule)
International Logistics Performance of Turkey

Described recently for the 2018 Logistics Performance Index, according to data from Turkey ranks 47 among 160 countries. Compared with previous years, Turkey seems to have exhibited the worst performance so far in 2018. So much so that both LPI scores and rankings cannot be seen in the decline of Turkey’s progress in any of the six criteria we mentioned above, compared to 2016, it observed that even experienced significant decline in the measure (www.tuik.gov.tr)

- 36th place in the Customs criteria with 3.18 points in 2016, it decreased to 58th place with 2.71 points in 2018,

- In 31st place in 2016 with 3.49 points in 2016, it decreased to 33rd place in 2018 with 3.21 points,

- 35th place in the International Shipment Criteria with a score of 3.41 in 2016; While it was 36th in the 2016 with 3.31 points in the criteria of Quality of Logistics Services, it decreased to 51st in 2018 with 3.05 points,

- In 2016, it rose to 43rd place with 3.39 points in 2016 according to the Tracking and Traceability of Shipments criteria and rose to 42nd place with 3.23 points in 2018,

- In 2016, it was ranked 40th with 3.75 points in 2016 according to the criteria of On-Time Delivery of Shipments, and it decreased to 44th with 3.63 points in 2018.

Logistics Performance Index and Customs, Infrastructure, International transportation, logistics competence, cargo tracking, classification is made using the subtitle timing of the data received from 160 countries, according to TSI, it is seen that Turkey is in Group 2.
Table 2. Cluster 1 for Logistics Performance

<table>
<thead>
<tr>
<th>Country</th>
<th>Distance</th>
<th>Country</th>
<th>Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>0.934</td>
<td>France</td>
<td>0.153</td>
</tr>
<tr>
<td>USA</td>
<td>0.259</td>
<td>South Korea</td>
<td>0.660</td>
</tr>
<tr>
<td>Australia</td>
<td>0.511</td>
<td>Netherlands</td>
<td>0.478</td>
</tr>
<tr>
<td>Austria</td>
<td>0.485</td>
<td>Hong Kong</td>
<td>0.225</td>
</tr>
<tr>
<td>Belgium</td>
<td>0.560</td>
<td>Spain</td>
<td>0.293</td>
</tr>
<tr>
<td>United Arab Emirates</td>
<td>0.360</td>
<td>Swedish</td>
<td>0.631</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>0.356</td>
<td>Switzerland</td>
<td>0.252</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>0.708</td>
<td>Italy</td>
<td>0.365</td>
</tr>
<tr>
<td>People’s Republic of China</td>
<td>0.719</td>
<td>Japan</td>
<td>0.545</td>
</tr>
<tr>
<td>Denmark</td>
<td>0.474</td>
<td>Canada</td>
<td>0.402</td>
</tr>
<tr>
<td>Finland</td>
<td>0.451</td>
<td>Luxembourg</td>
<td>0.640</td>
</tr>
<tr>
<td>Portugal</td>
<td>0.941</td>
<td>Norway</td>
<td>0.472</td>
</tr>
<tr>
<td>Singapore</td>
<td>0.422</td>
<td>Taiwan</td>
<td>0.728</td>
</tr>
<tr>
<td>New Zealand</td>
<td>0.263</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Customs, Infrastructure, International transportation, Logistics competence, Freight monitoring, Timing criteria are shown in the first cluster. There are many factors for ranking countries in terms of development. It is seen that developed countries differentiate from other countries in terms of criteria such as economic, health, educational level and technological developments. In terms of logistic performance, it is seen that the countries in the first cluster are the most developed countries in terms of industry and economy. It is seen that the countries in the first cluster are the countries that transfer technology to the world and direct the world economy.
Table 3. Cluster 2 for Logistics Performance

<table>
<thead>
<tr>
<th>Country</th>
<th>Distance</th>
<th>Country</th>
<th>Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil</td>
<td>0.713</td>
<td>Mexican</td>
<td>0.462</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>0.600</td>
<td>Panama</td>
<td>0.267</td>
</tr>
<tr>
<td>Indonesia</td>
<td>0.355</td>
<td>Poland</td>
<td>0.885</td>
</tr>
<tr>
<td>Estonia</td>
<td>0.432</td>
<td>Romania</td>
<td>0.438</td>
</tr>
<tr>
<td>Republic of Ivory Coast</td>
<td>0.487</td>
<td>Rwanda</td>
<td>0.832</td>
</tr>
<tr>
<td>South Africa</td>
<td>0.474</td>
<td>Slovakia</td>
<td>0.604</td>
</tr>
<tr>
<td>Cyprus</td>
<td>0.300</td>
<td>Slovenia</td>
<td>0.537</td>
</tr>
<tr>
<td>Croatia</td>
<td>0.397</td>
<td>Saudi Arabia</td>
<td>0.616</td>
</tr>
<tr>
<td>India</td>
<td>0.213</td>
<td>Chile</td>
<td>0.421</td>
</tr>
<tr>
<td>Ireland</td>
<td>0.828</td>
<td>Thailand</td>
<td>0.534</td>
</tr>
<tr>
<td>Israel</td>
<td>0.708</td>
<td>Turkey</td>
<td>0.350</td>
</tr>
<tr>
<td>Iceland</td>
<td>0.654</td>
<td>Oman</td>
<td>0.395</td>
</tr>
<tr>
<td>Train</td>
<td>0.789</td>
<td>Vietnamese</td>
<td>0.319</td>
</tr>
<tr>
<td>Lithuania</td>
<td>0.635</td>
<td>Greece</td>
<td>0.232</td>
</tr>
<tr>
<td>Hungary</td>
<td>0.672</td>
<td>Malaysia</td>
<td>0.277</td>
</tr>
</tbody>
</table>

According to the criteria of “Customs, Infrastructure, International transportation, Logistics competence, Cargo monitoring and Timing”; Turkey is among the countries in the cluster 2. Although Turkey’s economy in terms of size, is among the twenty largest country is not in the same group with developed countries in terms of logistics performance. The development of the logistics sector in a country depends on geographical location, physical conditions and investments in institutional infrastructure. In addition to this, Turkey’s presence in the Silk Road route, joining the continents, is surrounded by sea on three sides; are some of the geographically important advantages of Turkey. For these reasons, due to the growing trade relationship between Europe and Asia, Turkey’s logistics performance is expected to increase further (Black et al., 2009: 80).
Table 4 shows the group averages according to the criteria of Customs, Infrastructure, International Transport, Logistics Competence, Freight Monitoring and Timing. The averages of cluster where Turkey is located are 2.95 for customs, 3.07 average infrastructure, international transportation 3.21, 3.18 quality logistics competence, tracking 3.25 convenience, timeliness 3.61. When looked in more detail, Turkey’s; the average of customs is 2.71, the average of infrastructure is 3.21, international transports are 3.06, quality of logistics adequacy is 3.05, follow-up convenience is 3.23, timeliness is 3.63.

On the other hand, customs, international transports, logistics adequacy quality is below average in the cluster where Turkey is located. Turkey has found its own average above the average of its cluster in the fields of like infrastructure, ease of tracking and timeliness. However, it is possible to say that Turkey will see the benefits from recent infrastructure investments in later years.

Moreover, approximately 95% of transportation is carried by road in Turkey. Starting from the fact that combined transport
is the most economic mode of transport in international markets, it is necessary to harmonize the modes of transport in a general transport strategy (Kara et al., 2007: 399). On the light of these facts, it is necessary to increase the efficiency of transportation activities by using transportation alternatives such as road, airway, maritime and railway.

It can be said that Turkey’s logistics potential in its geography is important by evaluating with better and optimal ways. Therefore, it should make improvements in the legal, financial and administrative fields as well as the physical infrastructure. As a result, mainly, the legislation and regulations related to the logistics sector should be considered and discussed in a multidimensional way (Kara et al., 2009: 82).

Over and above, in addition to adding value to the country in logistics, economic, social, psychological, cultural, strategic, military and political fields; increase in national income, increase in purchasing power, decrease in unemployment as a result of employment increase, increase morale and motivation, increase education level, increase geo-political and geo-strategic importance, bilateral and multiple agreements, logistics bases, political power and leadership, strategic partnership, role model and model partnership, income distribution justice, increased tax revenues, increased competitiveness, economic growth and development, increased foreign trade volume, increased foreign capital can be mention as critical steps and parts of successful development (Erkan, 2014: 48).

Finally, there is a direct relationship between the logistical performance of an economy and job productivity at home country; in summary, logistic performance is increasing in countries with high productivity (Roy, 2011: 330). In addition, logistics performances will increase in countries that can increase their competitiveness (Mohan, 2013: 40). It is seen that producing
high-tech products, which is one of the competitive forces, will provide a sustainable development in logistics activities (Sandberg and Abrahamsson, 2011: 74).

**Conclusion**

One of the most important findings is that Turkey’s logistics channel diversification is lower its competitor countries. Maintaining the focus of the road transport in Turkey raises some disadvantages like loss of efficiency and rising costs. In this context, the diversification of logistics channels is vital to improve performance. In addition to this, Turkey, to come to a competitive position in the international arena; it needs to go through drastic revisions involving different disciplines such as changes in legal regulations and economic support packages updates. Finally, it can be stated that more detailed studies in this field will be very valuable in terms of guidance in terms of contribution to the literature and guiding Turkish authorities.
References


The Role of the Service Exports and Its Amplification in the Development of India

Umer Qadir Sofi

Abstract

The examination and evaluation of several developing economies is a common trend. Through this, one can easily understand how an economy can grow and develop. This knowledge helps to understand through what factors can trigger the growth and development trends of an economy. India is known as a developing country that achieved the status of an emerging economy within a complete decade. Indian economy considered as a closed economy till 2008. But after that, huge investment is made into service improvement and skills enhancement-based techniques. This makes the Indian economy more independent and self-sufficient as well. This directly enables the Indian economy to vast its scope. This increase in sales volume makes the Indian economy able enough to export the services provided or produced by the Indian economy. This situation directly improves the GDP volume, its growth trend and net national income level of the Indian individuals and its economy as well. A significant and rapid increase arose among the economy growth and development evel in India after the export of the service sector. This requires less production cost and increase the inflow of foreign currency in the country. This report indicates various statistics, figures that reflect the positive economic indicators
among the Indian economy after the start of exporting services in the Indian economy.

**Keywords:** Service exports, Growth, India

**JEL Codes:** L81 L86 M16

**Introduction**

Growth in the economy and its development is the ultimate concern of every country. Each country tries its best and makes several efforts to improve the performance and output of its several manufacturing as well as the service sector. To achieve high development trends in the economy, the countries mainly prefer to the vast scope of its service sector instead of the manufacturing sector. The limited cost and high output level which bring by the Service sector have made this sector the ultimate investment and desirable sector for development in any economy (Atolia, 2018).

India is an emerging economy which holds a significant position among the global economy. Being the world’s second-largest country, the population in India is increasing rapidly. Besides this, the easy availability of technology and the presence of high foreign direct investment trends are increasing the trend of business and employment opportunities for the population. Thus, the extent of manufacturing activities is increasing in India. But due to limited market and economic withhold by the manufacturing items at the export level, Indian govt has encouraged the service sector. The relevant amount of cost incurred or bear by providing services is quite low in contrast to manufacturing the things and export of these (Hu, 2018).

Improvement in the service sector and export trends in the service sector brings many folded benefits towards the economy and country as well. One can provide skills to local, national
and international levels only when they enough education and skill level. Thus, an increase in the service sector improve the quality of education in a country and improve the skills of the available labour or employment as well. Thus, the quality of service providers present in a country become strong day by day and grab the attention of international investors and individuals who are in search of such expert service providers (Fessehaie, 2018).

Currently, the majority of the Indian economy and its GDP level directly depend on the service sector of India up to a great extent. Currently, more than 30% of the Indian economy depends on the service sector as this sector contributes more than 35% of the country’s overall GDP. Due to his increased contribution of this sector towards the country’s GDP, the share of the service sector towards Indian exports is also increasing day by day.

Currently, different service-oriented sectors are working in India which holds a great contribution towards Indian service exports and towards its GDP level as well. Due to the presence of Microsoft and other advance IT-based businesses in India, the knowledge of Indian residents regarding IT, its innovation, and its strategies are increasing day by day. Due to this increase, abilities, and learning of Indians about installation, repair, and maintenance of IT base systems are increasing day by day. Along this, the presence of govt vocational centers for in entire India directly enables the poor individuals or residents of India to get necessary skills about maintenance, installation, repair, and monitoring of various electronic appliances and equipment’s which are frequently used by the majority of the businesses in the entire world (Kumar, 2018).

Such increased skills directly improve the quality of services provided by the Indian individuals I term of service. Currently,
the largest export markets of India include the USA and UAE, mainly in terms of exporting manufactured products. On the other hand, the entire European Union region is considered as the ultimate export market for Indian service exports. In several leading companies and businesses in the European Union, Indians are providing their services and skills either temporarily or on a permanent basis (Kumar, 2018).

Indians mainly provide Information Technology, Financial and Construction Engineering base services towards the entire world. Due to the high quality of education with the presence of international education and learning standards with a wider scope, Indians are able enough to provide excellent improved quality base customize services to their valued customers. Rapid advancement in the service sector is the result of the initiative made by the Indian govt. Encouragement to small entrepreneurs in terms of easy loans and fewer taxes are the key facts in this regard.

This rapid increase in the scope of the Indian service sector has enabled the Indian economy to export the surplus of services regardless of its nature to those who need it. Thus, the inflow of foreign exchange can increase in the country, which strengthens the local economy as well as improves the overall GNP & GDP of the country as well.

**Purpose of Research**

The ultimate purpose of this research is to investigate which sector of services in India is developing. Through this, the service exports made by Indians can be investigated, and its ultimate effects over the Indian economy can identify as well. This research will mainly find out how the service exports are affecting the development of India and its economy as well (Bhushan, 2018).
The Role of the Service Exports and Its Amplification in the Development of India

Scope of Research

This research will mainly counter the service base export facts and statistics present in the Indian economy. This research will pay keen attention to the service sector of India and the developing trends present in the Indian economy as well. Besides this, this research will highlight how the growth of the Indian service sector and services exports have strengthened the development trends of the Indian economy (Hu, 2018).

Data Collection

To analyses the role of the service sector towards the development of India, the help is sought from already published reports and research papers relevant to this research issue. For this, help will b mainly obtain from already publish relevant data and other electronic sources as well.

Data Analysis

India is still known as a developing country with an emerging economy a well. In the past two decades, India remains a closed economy with the least imports and export base trends (Bhushan, 2018).

The World Bank report has ranked India as the world’s largest growing country in terms of economic growth. It is estimated that by the end of 2050, the Indian economy will become the world’s second-largest economy. The recent increase share of the service sector towards the GDP and export of India will help and play an important role in this regard. Currently, India has more than 20% of the total world population, and out of the total population of India, more than 40% of the population is engaged with service sector base businesses at the national and international levels. It is estimated that every
year, the volume of migrations from rural areas to urban areas of India is increasing day by day. Most of such migrants start their own business by using their skills. Such migrants mostly involve in a service-based business and perform various activities in the different service sectors. The expatriates of India who are working at some other destinations and are providing their services to their employers will count in the category of SERVICE EXPORTS AS WELL. Through this, the inflow of foreign currency goes up in the Indian economy. Thus, the ultimate benefit arises over the economy of India, and it holds a development trend.

Table 1: Global Competitiveness Report 2017-2018

<table>
<thead>
<tr>
<th>South Asia</th>
<th>Global Competitiveness Report 2017-2018</th>
<th>Global rank*</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td></td>
<td>40</td>
</tr>
<tr>
<td>Bhutan</td>
<td></td>
<td>82</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td></td>
<td>85</td>
</tr>
<tr>
<td>Nepal</td>
<td></td>
<td>88</td>
</tr>
<tr>
<td>Bangladesh</td>
<td></td>
<td>99</td>
</tr>
<tr>
<td>Pakistan</td>
<td></td>
<td>115</td>
</tr>
</tbody>
</table>

Source: (Weright, 2017).

The contribution of the service sector towards the GDP of the country started by the end of the financial year 2006 when India became an open economy and provided a direct foreign investment chance for several leading international businesses and brands. Through this, a sense of awareness raised among
the native Indians about what work and services they can perform and how they can use their skills. During that era, individuals evaluate the employment trends present or demand by foreign investors. This enables the Indian population to understand what foreign businesses need services and skills. This motivated the Indian population and persuaded them to learn more and more about several services and skills. Due to which, their earning level goes up, and they become able enough to provide all those services which are mainly needed by the local business and foreign business as well (Hu, 2018).

![Image of India's Gross domestic Product and Energy Consumption](image)

**Figure 1. India’s Gross domestic Product and Energy Consumption**

The image mentioned above reflects that after becoming an open economy, the volume of GDP starts increasing rapidly and holds a consistent and faster-growing trend (Atolia, 2018).

By the end of the financial year 2010, the Indian economy initiated to establish IT-based businesses through Small and medium enterprise basis. Through this SMC base, the Indian govt encourages the local entrepreneurs and individuals to start their IT-based businesses. The number of businesses
established and incorporated in that era directly affects the economy of India in the future. The businesses commenced during the 2008 to 2010 era, became strong, and hold a large scope by the end of the financial year 2018. Due to this, the earning level through the service sector goes up and brings more strength and development towards the Indian economy. Currently, India has more than 105 different types of service-based businesses. Such a highly diversified product portfolio of the Indian service sector has geared up the total output or quantity of the services which the Indian economy can produce. This high diversity has geared up the extent of innovation, creativity, and novelty among the Indian service sector. Thus, the demand for the Indian service sector is increasing rapidly. The initiative of Indian govt to start a business through a limited amount of Capital like 50k has enabled those individuals as well to start their service based business, which has limited skills, learning, and knowledge level (Hu, 2018).

Development of an economy is the ultimate concern of every country regardless it is developed or developing. Through the presence of development and growth trends, a country can improve its financial position up to a great extent. Only rely on the manufacturing sector, and its related exports are not favorable by all means. Usually, developing countries export relatively raw material or semi-furnished products or food items as well which hold a relevant low or less economic worth. In such a scenario, the role of services and export of services is quite important. Services require no production and manufacturing cost in contrast to the manufacturing of products. Services require only the skills of the producer or provider. Through this, the production of services requires no spending. Thus, the export of services can increase the inflow of foreign currency within a country. As a result of which,
the earning opportunities and earning volume and income level of the service providers goes up rapidly. This improves the per capita income level of the individuals in a society and the entire Net National income level as well (Bhushan, 2018).

Such improvement in the service sector brings a positive effect on the Indian economy. When services are exported, the burden of tariff and non-tariff based regulations and their relevant cost level also goes down. Through which, international trade becomes easy and simple for the Indian economy which requires less input and brings maximum output for the traders and entrepreneurs. This brings more investment opportunities for service providers and makes them able to turn the country’s balance of payment in a favorable direction. Before the exports of sales, usually only products are exported, and several other goods and services are imported. In such a scenario, the balance of payment becomes unfavorable. But when the volume of services exported goes up, then the export proceeds go up in contrast to payment in return of import. This becomes a cause of positive improvement in the Indian Balance of payment (Kumar, 2018).

Such factors collectively play an important role in making the Indian economy one of the emerging economies of the world. Through this, the growth and development speed of the Indian economy are increasing day by day.
Figure 2. GDP Per Capita of India 1820-2013

Figure 3. GDP Growth of India

Figure 2 and 3 mentioned above reflect that the Indian GDP level is increasing day by day. When the trend of exporting services goes up in India, then the GDP growth trends of the country hold positive trends that are significant and strengthen the overall financial performance of the country (Fan, 2018).
**Discussion**

The figures mentioned above, figure, and other statistics make it clear and visible that how much the exports of services are important for the development, growth, and success of any economy. Production and services are the two ultimate pillars of every economy. When both of these pillars go up and become strong day by day, then the overall economy of the country also holds positive and upward trends that are favorable for the govt as well as for the residents and society of that country as well. Growth trends in any of one pillar of the economy can become the cause of market disequilibrium and adverse conditions of the economy. In such a scenario, the ultimate burden will shift over the production sector. Through which the irrational use of business resources and environmental resources can go up. Thus, everyone invests in the manufacturing sector only, and the country has to seek services from expatriates and others.

But when a country produces and offers services on a large scale, then the burden of using business resources and other environment resources can reduce. Through this, a considerable decrease can observe in manufacturing activities, which become the cause of sustainable development. This portrays the economy as more positive and attracts several foreign investors to come and invest in such economies where limited production or manufacturing activities are performed. It seems that such an economy is still under potential, and several aspects of that economy are still not explored. In such a scenario, the volume of FDI and other foreign investment trends goes up in an economy (Bhushan, 2018).

When countries export services, then the GDP trends and Net National income level of the country become positive day by day. This can be easily examined or witness by evaluating
the previous GDP growth trends present in the Indian economy. Then the economy starts exporting services, and the GDP growth trend becomes up day by day.

**Conclusion**

Offering service exports directly strengthens the foreign exchange volume and foreign currency reserve in the country. When services are exported, the spending of exporting countries is quite low, but on the other hand, the export proceeds are made in terms of foreign currency. This improves the buying power and saving level of the service providers and makes the ability to make several investments into other sectors of economies. This helps the overall economy goes up and increases the speed towards the boom phase of the economy and its development as well. When the country’s exports go up, the volume of international payment of a country goes down, and the volume of the international collection goes up rapidly. Such factors are considered as positive indicators of a developing economy. Such indicators collectively have turned the developing Indian economy into an emerging economy that holds a vast scope.

**Recommendations**

The recommendation of this research paper is mentioned below:

1. The findings of this research can be used to make a future report over Indian and other emerging economies.
2. The findings of this research are helpful for economists and investors to understand how a developing country can increase its development process.
3. The results of this research are important to understand the ways through which a country can gear up the speed of its economic growth and development.
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The Economic Effect of the TV Series and Films on the Tourism: 
The Case of Antalya

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Abstract

TV series and films are thought to be an important factor in increasing demand for the marketing of the country’s touristic values. Therefore, it is seen that series and films increase the country’s tourist demand. Increasing conditions of international competition force companies to use different marketing techniques and to work on the image of the country in which they exist. Knowing the wishes of tourists in advance and having information about their attitudes and behaviors play an important role in increasing the demand for tourism. The aim of this study is to determine and evaluate the effects of tourism sector in the Turkish economy and also the effects of Turkish TV series and films on tourism sector. Furthermore, the historical development of tourism sector; the effects of tourism sector on the Turkish economy and the contribution of Turkish TV series and films to the tourism sector under the cultural tourism schemes are discussed.

In this study, the findings obtained by using face-to-face interviews and questionnaires with tourists in Antalya and are

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1 This study was produced from the master thesis completed by the first author under supervision of the second author.
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analysed chi-square test by SPSS 23 programme. The survey was applied to the tourists to collect data about the research. The universe of the research is the tourists arrivals to Antalya in 2018. The 384 people who were selected by the method of sampling universe are the sampling constitutes. In this context, questions were about the demographic characteristics of the tourists. There were questions about the destination of the tourists and whether the destinations placed in Turkish TV series and films affect their preferences. According to the findings of the study, Turkish TV series and films have an positive impact on the tourism sector in Turkish economy. Therefore, studies on TV series and film tourism, which has an important place in economic and social development of countries in the globalizing world, are important in terms of both the success level of tourism and its effects on national/regional development.

**Keywords:** Tourism, TV Series and Film Tourism, Regional Development, Economic Development.

**JEL Code:** O1, O11, R58, L83

**Introduction**

When the historical process of the tourism sector is analyzed, it is seen that tourism sector is becoming more and more important in terms of economy and tourism sector is among the fastest developing and growing sectors in the world. In the early ages, people were replaced by instincts of shelter, nutrition and survival. In this period, which is connected to the land, all the resources needed for the survival of human beings are procured from where they are, and this leads to another period in the history of humanity and the fact that a different class called the merchant mediates change. In ancient Greek and Roman times, it is very important that the sea and
land routes are suitable for travel. In this period, it is seen that travel increases with the development of socio-economic development level and the emergence of activities such as theatre and sports besides the economy of change. In the Middle Ages, visiting the holy land comes to the fore. During this period, the Crusades from Europe to the Middle East emerged from religious journeys across the continents, leading to the importance of tourism in the world. The Renaissance, which emerged as a reaction against the authoritarian and conservative understanding of the middle ages, prepares the West for new breakthroughs with the developments in science, art and religion. The notion that colonialism and discoveries are highly influential in the historical development of tourism is the dominant feature of this period (ERALP, 1983:5,6). The birth of tourism centres can be said to be towards the end of the 18th century. It is observed that the interest of the people to the coasts, healing waters and sandy areas is increasing day by day and it is known that the hot springs and beaches are established under suitable conditions in the natural rich places. It is observed that there has been a structural change in tourism with the Industrial Revolution and especially with the developments in transportation system. In this respect, it is noteworthy that in a period of intense social life, tourism has emerged and the phenomenon of tourism has evolved over a long period.

With the effect of globalization, tourism sector has been among the fastest developing sectors in the world economy since the end of the 20th century. In this process, it can be said that the rapid development of technology, the development of transportation and social networks, the increase in service quality, the acceleration of competition, the capital flows in a globalized world, the development of finance and banking
activities give a positive impetus to the tourism industry and have a large share in the development of international tourism. In other words, with the globalization, the removal of borders between countries, the removal of barriers between countries, the recognition of countries with different countries and cultures, the use of common languages for the whole world, and the exchange of culture and education in the academic field positively affect the tourism sector.

With the effect of globalization, tourism sector has been among the fastest developing sectors in the world economy in recent years. Tourism revenues constitute the largest share of the services sector, which constitutes an important part of the GNP of developed and developing countries. While the tourism sector plays an important role in the increase of national income on the one hand, it is effective in closing the balance of payments deficit with the foreign exchange revenues it provides. As a social and economic activity, 25 million people joined the tourism sector in the 1950s and contributed 2 million dollars to the economies of different countries of the world. With the increase in the number of tourists, the number of people participating in international tourism in the 1970s increased to 160 million people and tourism revenues increased to 18 billion dollars. This figure can be interpreted as an expression of the rapid development of the tourism sector in a short time. Today, the number of participants in the world tourism reaches approximately 1 billion 235 million people. Besides the contributions of the tourism sector to the national economy, it can be said that it is important because it provides a solution to the employment problem and has the power to create indirect and direct employment. In addition, despite its positive contributions such as bringing foreign exchange to the economy, creating
new jobs, payment of debts, acceleration in investments and taking a positively increasing role in the revenues of the state, the relationship between seasonal unemployment and inflation is also considered.

Today, due to the increasing importance and share of tourism in both underdeveloped and developing countries, economic plans, policies and programs are widely included. It is known that the Sustainable Development Summit attaches great importance to the tourism sector in poverty reduction with an approach to “poverty eradication for a sustainable world economy and a fair life”.

TV series and film tourism are examined under the umbrella of cultural tourism. TV series and film tourism; The destination which is placed as a result of the screening of destinations on television, internet and cinema screens is called the tourists who visit. Destination means “the journey’s end” or “end of the line” in the Turkish Language Association. As a result of the destinations placed in TV series and films, it develops the tourism sector of that region or country. Tourists generally have limited information about where they are not going. People get this information from TV series and movies, the internet and the people around them. These people examine the images of alternative destinations with the limited information they have. Therefore, it can be said that the image is extremely important for the destination selection. TV series and films create strong emotional ties to spaces that offer certain activities that tourists may wish to try or imitate. Placing destinations in series and films as a product leads to a positive image. The audience will be curious about the destination they have met and will want to see it. TV series and movies provide information to potential visitors. This way, visitors can get information without going to a destination. When the destination image has a
positive effect, the preference rate will increase. Turkish TV series to be published in foreign countries provide a positive contribution to Turkey’s promotion.

In this context, it is working in the tourism sector of the impact on Turkey’s economy, and its contribution to the series of films of the tourism sector is studied. In this study, the definition of the concept of tourism and the factors that cause tourism are mentioned. As a new concept in the tourism industry it focuses on TV series/film tourism and its effects. Also the TV series and movies role in the marketing of destinations in Turkey, Turkish TV series and movies of the regional effects and Turkish TV series and films of being given to its contribution to tourism and Antalya’s tourism potential is done the results and evaluation of the findings after the tourist area of research.

**Definition of Tourism**

Affecting many countries in the world economy and the global economy, such as Turkey reinforces the link between culture and tourism (Serdar Sezer, 2010:3). Tourism is the service aimed at fulfilling the needs of people arising from their travels and temporary accommodation in the places they go. People who travel, participate in different entertainment, sports, relaxation and other activities (Kahraman ve Türkay, 2011:1). From an economic perspective, this event, which has a wide impact and is called tourism, is the main feature of today’s civilization (Yıldız, 2011:55). It is possible to say that information and service stand out in the new economic structure and the developments in the economy with the effect of globalization. With the inclusion of the tourism sector among them, it is at the top of the customer-centered service sector with both demand and supply aspects (Karataş Ve Babür, 2013:18).
People move from their place of residence to another region or another country temporarily and the purpose of traveling to these places is to fulfill their psychological and socio-cultural needs such as resting, traveling, having fun and learning (Yıldız, 2011:55). The word “tour”, which is the Latin word for tourism, is derived from the word “tornus”. Turning means going around. This word has entered into Western languages without losing its meaning. In French, “tourner” and “tour” are still used to return. A tourist is a person who participates and directs the tourism event, travels temporarily by leaving his or her place temporarily for reasons not requiring commercial gain, seeking psychological opinion, and conducting consumer behaviors with certain spending power and time (Usta, 2016:8). There are various opinions in defining tourism and a few examples can be listed as follows: F.W. Ogilvie defines as follows: It is a tourist who fulfills two conditions such as being away from permanent residence and spending money that he does not earn from the place he visits during the period, provided that it is not less than one year. A. J. Norval, a person who travels to a foreign country for any reason other than permanent or business activity and who has spent his or her stay elsewhere in his temporary stay in that country shall be deemed a tourist. Norval accepting those who travel to foreign countries and those who spend the money they earn outside the country they are traveling as tourists, it is observed that the economic aspect of the subject is given more emphasis. Tourists are those who stay or stay longer than 24 hours in accommodation facilities provided by the country or region where visitors from different countries or regions live temporarily. Visitors who stay in the country they visit for less than 24 hours are called day trips (Budak, 2000:4-5).
Tourism has attracted the interest of scientists since the end of the 19th century. According to F. W. Ogilvie, science is discussed for the first time in an article titled *adli Sul movimento forestieri in Italai Gi* published in Giornale degli Economist in Italy in 1899. In contrast, the first study of wolf krapf tourism was carried out by E. Guyer-Feuler in 1895 and published by Beitraege zu einer statistic des fremdenverkehrs. Joseph Stadner treats tourism as an economic activity in 1884, with the Austrian economist Herman Von Schullar in 1910 focusing only on the economic dimension of tourism. One of the most important functions of tourism is to provide the flow of foreign exchange resources to the country and also to investigate the effects of tourist expenditures on the economy. (Dinçer, 1993:6).

The world is witnessing the changing of social life. In the past, a world that witnessed the wealthy travels such as merchants and aristocrats today have to travel a lot due to the fact that the working hours are reduced and the conditions are improved and the financial situation improves. At the same time, as a result of the development of the means of transportation, all segments of the society are able to travel. (Budak, 2000:12,13). Tourism demand, which is the most important element of the tourism event, is influenced by different factors. Factors that encourage people to travel are generally considered to be pull or push factors. In addition to factors that encourage people to travel, it supports the attraction in the region or country to be visited. These two reasons drive national and international travel demand (Sönmez, 2012:16). It is generally accepted that people travel under the influence of the demand-side factor. The most important of these factors are as follows; Curiosity, Recreation and Entertainment, Religion, Culture and Education.
The alternative tourism of the tourism sector, which has been put forward to spread not only to certain seasons but to the whole year, is expanding gradually. Alternative tourism types are briefly mentioned below:

_White Water Tourism_; running water tourism is important for water sports such as rafting, canoeing and swimming.

_Sports Tourism_; a large number of people are involved in tourism activities for both national and international games.

_Health and Thermal Tourism_; Thermal tourism, mineral hot water bath, mud bath, climate, physical therapy and training treatments combined with supportive treatments such as the use of these resources for recreational purposes.

_Mountaineering and Winter Tourism_; It is an alternative tourism type for mountains with its fresh air, scenery and activities (Çelik, 2018:196-197).

_Golf Tourism_; With the increase in the desire to play golf, golf has emerged as a kind of tourism (Kozak, Kozak, 2010:696).

_Faith Tourism_; Turkey in the context of the three monotheistic faith tourism projects to improve the extant visit important religious centers, introducing visitors to improve the lighting and angles by taking such studies are being conducted to provide ease of transportation (T.C. Kültür ve Turizm Bakanlığı).

_Congress Tourism_; It is the whole of accommodation, events and relationships that occur due to the gathering of people in order to share information in the fields and professions where they live and where they are experts outside the workplaces (Çelik, 2018:200).
Economic Impacts of Tourism and Its Impact on Regional Development

Economy; It is a social science that strives to understand the choices that people make between the scarce resources that fulfill their wishes. Economy; industry, services and agriculture. These sectors are divided into their own sub-sectors, the total production of all of these sectors within a certain period of time shows the total production value of the economy. The economic conditions and security perception of a country are important both in service supply and tourism demand. Travel costs, as well as the economic situation of people, seriously affect people’s holiday decisions. A country with a healthy economy prepares the infrastructure of the tourism sector. Its internal economic dynamics seriously affect the structures of national, local and international economies on the tourism industry. (Zengin, 2010:104,105).

Tourism positively affects the economies of many countries around the world. Tourism sector has become an important sector for the economies of developing countries. Because the country’s economy provides the needed foreign exchange, increases employment, reduces unemployment and increases the welfare of the country. One of the most important aspects of developing countries is that they can benefit in a shorter period of time. Tourism is a sector that can develop employment in a short time after a successful campaign by providing foreign exchange input. It makes a significant contribution to overcome the biggest bottleneck of the developing countries, the foreign exchange bottleneck. It also stimulates the economy with the multiplier effect of tourism expenditures and investments for tourism. Compared with other sectors, it is seen that the tourism sector is more productive. Compared to other sectors, marginal capital ratio in tourism is low. Low marginal capital means that
investment efficiency is high. Tourism ensures redistribution of income and welfare within and between countries. A flow of income is provided through tourism towards developed countries to developed countries (Zengin, 2010:104-105). Tourism, especially in developing countries, eliminates the need for foreign exchange, increases employment at the same time is called an activity that improves modern life. Tourism plays important roles such as revitalizing the general economy, increasing personal income, increasing central and local public revenues, eliminating income distribution imbalance and regional development (Gülbahar, 2009:28). For the solution of the national and international economic problems faced by the national economies, the tourism sector constitutes an exit point due to its economic characteristics in overcoming the bottlenecks (Kızılşoğl and Erbaykal, 2008:353).

For a sustainable world economy and a just life, it can be said that in the fight against poverty on the basis of poverty eradication, the importance of the tourism sector in the international platforms is of primary importance. In this respect, field practices are observed in economic plans, policies, programs and projects due to the increasing importance and share of tourism in both underdeveloped and developing countries/regions. In this context, the tourism sector is of great importance in terms of regional development and effective use of resources. The tourism sector is especially important in terms of eliminating the imbalance between regions. As a result of a planned tourism policy, it is possible to ensure a balanced development of the regions with rich tourism resources, which do not have sufficient resources and development opportunities in the agricultural sector and the tourism sector (Çeken, 2008:298).
A new concept of series/film tourism and its effects in the field of Tourism

Television, advertising, radio, social media, friend suggestions and sources of personal information are involved in the emergence of the destination image. Series and films are important sources of information. Movies are a widely accepted source of information that has the ability to quickly change the image of a destination. The persuasive feature of films is strong. It is said that destination management and producers have moved together in recent years. Therefore, film tourism, its implications and scope have emerged as issues to be explored. The evaluation of destinations in the form of a product is placed in the form of a product in the films. The marketing opportunities created by Film tourism increase the chances of destinations taking part in this market. At the same time, the support given to filmmakers suggests that film tourism will develop over time. It is sometimes said that watching a movie means traveling. Because people are affected by the destination or its cast as a result of the film they are watching. Instead of film tourism, concepts such as “film-oriented tourism”, “screen tourism” and television series tourism are used in the research. But in practice, the concept of film tourism is widely used. Without arriving at the destination, it is impossible to have an experience about the destination. Therefore, it is important to build trust in the destinations where people will arrive. The films not only promote the destination, but also provide some experience by arousing curiosity about it. Through films and serials, audiences considered themselves to be part of destinations (Yilmaz, 2015:204-206).

Film tourism, which is under the umbrella of cultural tourism, is becoming a growing phenomenon around the
world. Series and film tourism on the one hand, while the development of the entertainment sector on the other hand, increases international travel (Pazarbaşı and Akgündüz, 2013:2). No motion pictures have been shot in Turkey that can be included in the subject of film-based tourism. However, on an international basis, the film Çanakkale “konuluTruva”, which positively affects Turkey’s tourism, is being shot. Following the withdrawal of the Trojan film, there is a 73% increase in Çanakkale tourism (Aydın, Duğan and Gürbüz, 2017:38,39).

There is an increase in the number of visitors to the regions, cities and countries that are the subject of series and films, as well as an increase in the spending patterns of visitors. He is thus known to have made significant contributions to the economy of the region, city and country (Beceren and Durgun, 2011:591). It is possible to say that in recent years series and films have started to be used for promotion of Regions, Cities and countries for tourism purposes. People want to see the destination placed in the series and movies after watching the series and movies. And so Series and films encourage people to tourism. Especially in Turkey, the series increases people’s interest towards the shooting places. Series and films have a wide spread impact, but people are known to change their attitudes and opinions towards the destination. Series and films are becoming a core conductor by having the power to create images against destinations. Based on this, the virtual world, such as the internet and television, has recently taken an important place in people’s lives. Thus, the series and films shown on screens are seen as the mass media that enter people’s lives. On the other hand, the level of awareness of the places where the series and films are shot is increasing. Therefore, it is possible to make a film set in an unknown and backward region. This situation is effective for
the space in two ways. The first is an economic contribution to the place. The second is the marketing of the place in terms of Tourism. Its contribution in economic terms increases the employment, investment and income of the region (Durgun, Beceren and Demiratan, 2011:766).

Television, which has gained importance within Visual Media Alternatives, attracts people’s attention. The series and films offer certain activities that tourists may wish to experiment with or imitate, and create strong emotional bonds towards venues. Placing destinations in series and films in the form of a product causes destinations to create a positive image. Viewers wonder and want to see the destination they meet (formal, 2012:54). The series and films provide potential visitors with information about the destination and its appeal. Visitors can have information, ideas and images about the destination without going to the destination. Serials and films play an important role in the formation of a positive image (Çakır, 2013:82). When the image of the destination has a positive effect, the rate of preference will also increase. Therefore, creating and managing the image that can be enjoyed is still very important for the effective marketing of the destination (Yılmaz and Yolal, 2008:177).

With the introduction of serials and films in destination marketing, it is easier to reach larger audiences thanks to series and films. Therefore, destinations come to the fore and positively affect the image (Özdemir Güzeli and Aktaş, 2016:113). By keeping an eye on the emerging innovations in destination marketing and the high level of marketing costs, the destination marketing organization is turning to film tourism and marketing activities by abandoning the method it used in the past. In the past, destination marketing organizations would advertise a region or a place, then wait for tourists to
come there. In our era, destinations with film tourism are placed in film and therefore, with the increase in the number of tourists, the image of destinations is developing. Thus, long-term destination marketing is carried out. By placing destinations in series and films, it provides promotion that it cannot achieve with marketing methods. This creates a long-term effect (Kömürcü ve Öter, 2013:16). Destinations placed in the films are gaining the status to be visited continuously rather than seasonally. Benefits of Film Tourism saves tourism from seasonality and transforms it into continuity, which is also of great importance for the people who invest in the region as well as for the business and life-sustaining people (Elena Tuclea and Nistoreanu, 2011:28). Films and television series take on the role of communication channels. Relaying images from different destinations to potential tourists (Spears, Josiam, Kinly and Pookulangara, 2013:59).

Table 1: Example Table Affecting Tourism Demand of TV Series and Films

<table>
<thead>
<tr>
<th>TV Series and Movies</th>
<th>Destinations</th>
<th>Increase in Visitors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Troy</td>
<td>Çanakkale, Turkey</td>
<td>73% increase in tourism</td>
</tr>
<tr>
<td>brave Heart</td>
<td>Wallace Monument, Scotland</td>
<td>300% increase in visitors after movie screening</td>
</tr>
<tr>
<td>Lord of the Rings</td>
<td>New Zeland</td>
<td>From 1993 to 2003 the number of tourists from the UK increased by 10% each year.</td>
</tr>
<tr>
<td>Captain Corelli’s mandolin</td>
<td>Cephalonia, Greece</td>
<td>50% increase in three years.</td>
</tr>
<tr>
<td>Emotion and sensitivity</td>
<td>Saltram House, England</td>
<td>39% increase</td>
</tr>
<tr>
<td>Mission Danger 2</td>
<td>National parks in Sydney</td>
<td>200% increase in 2000.</td>
</tr>
<tr>
<td>Dancing with wolves</td>
<td>Fort Hays/Kansas</td>
<td>20,000 new tourists</td>
</tr>
</tbody>
</table>

Source: Hudson and Ritchie, 2006: 389
Table 1, despite to the fact that film was not shot in Çanakkale, the film is known to show a 73% increase in Çanakkale tourism. It is said that there was a 300% increase in the number of visitors after the film’s screening at Wallace Memorial Scotland, where Braveheart was filmed. National parks in Sydney, where mission danger 2 was filmed, have seen a 200% increase in visitors.

In Japan, a national channel broadcast a 45-minute documentary program about Turkish TV shows, while the documentary described the impact of Turkish TV shows on the tourism sector and exports. The report emphasizes that Turkish sequences are felt from Macedonia to Malaysia. It is broadcast on television channels of countries such as Germany, Austria, Switzerland, Thailand, Taiwan, Uzbekistan, Azerbaijan, Middle East countries, Kazakhstan, Kyrgyzstan, Bosnia, Ukraine and Singapore. However, a report by Time magazine highlights that the series shot in Turkey has had an impact in dozens of countries from Macedonia to Malaysia (Örgün, 2012:58).

People’s interest in the filming locations of Motion Pictures and television series has increased. Today, watching TV is becoming a common activity. People watch TV in their spare time for their needs such as relaxation, fun and information acquisition. It is possible to see that the importance of series and films has increased in terms of tourism marketing. Tourists want to go to the places where they watch shows and movies. People admire not only the locations of the films and serials they watch, but also the people who take part. This is also important in terms of Tourism Promotion (Kömürcü and Öter, 2013:15).

One of the principles of tourism can be called promotion countries want to announce their tourist values by different
methods and ways. The aim of the promotion is to inform the masses and increase sales indirectly. Today, it is observed that the competition in the field of international tourism is great and strong. Countries are struggling to get the biggest share of the world tourism pie. In order to increase its profit with its potential and image, it is important that Turkey give importance to promotion. The source of the message is extremely important. The fact that the message comes from the source that people adopt increases productivity. If there is any mention of a film showing the impact of cinema on tourism, it is the big-budget Sommers ‘1999 film The Mummy. Due to its success at the box office, the second of the series was shot in 2001 and the filming is still taking place in Egypt. Parallel with the screening of the film is a revival in the tourism of Egypt. Similarly, with the release of the film Lord of the Rings, tourism in New Zealand has increased dramatically. Of course, even if the film is not the cause of the increase in these films, the effect of the promotion can not be ignored. The positive image of Turkish series and films has increased with the breakthrough of Turkish cinemas in the late 1990s. In recent years, Turkish series films have attracted the attention of the world by taking on family, love and human issues, while increasing the export of the series, on the other hand, thanks to its positive image and the promotion of the country, it makes important contributions to the tourism sector (Yanmaz, 2011:115-116).

After Yugoslavia disbanded in 1992, it was divided into smaller countries. As a result of the cultural similarity of the separated countries and the common language they speak, there are not many television channels in the region. It is said to be the most watched and talked about TV series in Croatia in 2012. Between 2012 and 2013, the Turkish series aired on both private and state channels in Bosnia and Herzegovina,
making it the most watched program. They have been fanatics of Turkish TV series since 2010. Turkish series create good image in Balkan countries. At the same time, Turkey, which is economically rich relative to the Balkan countries, has a modern and rich image (Noroglu, 2013:7-8).

**Impacts of series and films upon tourism sector of Turkey: Antalya’s example.**

At this stage of the research, the socio-economic structure of Antalya province is mentioned first. The results of the survey with foreign tourists coming to Antalya are then evaluated.

**Socio-Economical Structure Of Antalya**

When we look at the social indicators of Antalya, it is seen that it is parallel to the average of Turkey. Even if the number of students per teacher in Antalya is parallel to the Turkish average, the amount of water supplied and the amount of electricity consumption per person in municipalities is higher than the Turkish average. These data show that the level of development of the province is better.

When viewed in Table 2, it is seen that the social indicators are parallel to the Turkish average. It is stated that the proportion of illiterate women in Antalya is the lowest in Turkey with 3%. It is also one of the best provinces along with Ankara and Muğla provinces in terms of number of nurseries per child. It is ranked second after Mersin, which is the highest proportion of female employees. 26 among all provinces according to the gender equality index. Ranked (Ansiad and Turkonfed, 2015:31).

The commercial sector accounts for 34% of Antalya’s total revenue. In Antalya, 60% of imports and 67% of exports occur with the member states of the European Union (Antalya Metropolitan Municipality). Even if Antalya has a higher
income than the average of Turkey with tourism revenues, it is quickly affected by local and international developments affecting tourism. The share of industry in the TR61 region, including Antalya, is around 13%, much lower than the Turkish average. In the TR61 region, the weight of the agricultural sector is 13%. The sectors with the highest sectoral weight of Antalya are tourism and agriculture. The items with the highest inflation are restaurants, hotels and food prices periodically. Antalya in terms of many economic and social indicators, it is seen that Turkey is above average. The unemployment rate is low and higher than the Turkish average in terms of female employment and employment. (Ansiad and Turkonfed, 2015:49).

Antalya’s trade is seen to have moved after the 1970s. It is known that accommodation, recreation and luxury shops were opened and gradually increased with the tourism that developed after the 1980s. With the development of technology and the spread of its use, the increase in agriculture and industry takes place, while the commercial market is known to gain momentum. Antalya Chamber of Commerce and Commerce was seen to be the most effective organization in Antalya. Other important organizations are Antalya Mercantile Exchange and Antalya Exporters Association (Antalya Metropolitan Municipality, 2019).

**Table 2: Comparison of Social Indicators With Turkey’s Antalya**

<table>
<thead>
<tr>
<th></th>
<th>Turkey</th>
<th>Antalya</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Students per Teacher in Primary Education 2013-2014</td>
<td>19</td>
<td>18</td>
</tr>
<tr>
<td>Number of Hospital Beds per Hundred Thousand Persons 2013</td>
<td>264</td>
<td>234</td>
</tr>
<tr>
<td>Number of public libraries per thousand inhabitants 2014</td>
<td>268</td>
<td>147</td>
</tr>
<tr>
<td>Daily amount of water supplied per capita in municipalities (liters/person-day), 2012</td>
<td>216</td>
<td>282</td>
</tr>
<tr>
<td>Total electricity consumption per person (kwh), 2013</td>
<td>2.583</td>
<td>2.865</td>
</tr>
<tr>
<td>Number of cars per thousand people, 2013</td>
<td>121</td>
<td>170</td>
</tr>
<tr>
<td>Number of accidents per ten thousand vehicles, 2013</td>
<td>90</td>
<td>85</td>
</tr>
</tbody>
</table>

When viewed in Table 2, it is seen that the social indicators are parallel to the Turkish average. It is stated that the proportion of illiterate women in Antalya is the lowest in Turkey with 3%. It is also one of the best provinces along with Ankara and Muğla provinces in terms of number of nurseries per child. It is ranked second after Mersin, which is the highest proportion of female employees. 26 among all provinces according to the gender equality index. Ranked (Ansiad and Turkonfed, 2015:31).

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and Antalya Exporters Association (Antalya Metropolitan Municipality, 2019).

Table 3: Antalya Exports and Imports by Years (Thousand $)

<table>
<thead>
<tr>
<th>Years</th>
<th>Imports</th>
<th>Export</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>816.586</td>
<td>864.216</td>
</tr>
<tr>
<td>2011</td>
<td>689.246</td>
<td>961.011</td>
</tr>
<tr>
<td>2012</td>
<td>666.709</td>
<td>977.895</td>
</tr>
<tr>
<td>2013</td>
<td>754.466</td>
<td>1.047.253</td>
</tr>
<tr>
<td>2014</td>
<td>808.192</td>
<td>1.032.682</td>
</tr>
<tr>
<td>2015</td>
<td>976.463</td>
<td>961.270</td>
</tr>
<tr>
<td>2016</td>
<td>1.124.060</td>
<td>997.112</td>
</tr>
<tr>
<td>2017*</td>
<td>869.747</td>
<td>886.265</td>
</tr>
</tbody>
</table>


As seen in Table 3, it is understood from the table that the increase in the trade volume of Antalya between the years 2010-2017 has been realized. Looking at the data, it is seen that exports increased between 2013 and 2014 and even after it was said that there was a slight decrease in the years that followed, there was an increase compared to 2010. While imports in 2010 were 816.586 million dollars, it is seen that according to 2017 estimated data is 869.747 million dollars. Exports amounted to $ 864.216 million, compared to $ 886.265 million in 2017.

Tourism Potential Of Antalya

Antalya is 2.6% of the territory of Turkey. The southern side of Antalya has the status of Metropolitan, with the Mediterranean Sea and the land areas limited to the Taurus mountain range. The city of Antalya is a very convenient city for tourism because of its natural beauties. With the development in the tourism sector, the population of Antalya
is increasing. Antalya has all the riches for various tourism branches due to its archaeological and cultural riches as well as its natural beauties. It has ancient cities, 530 km long coast, monumental tombs, beaches, harbors, forests joined by the sea, streams and waterfalls, as well as natural and cultural beauties. Besides the traditional tourism potential of Antalya there is also alternative tourism potential. Antalya has the status of a city with a very suitable infrastructure for golf tourism. More than 40 million people in the world are involved in this sport and also those who are involved in this sport are generally known to have upper income. When we look at Europe, the proportion of those engaged in this sport increases by 20% every year. It is possible to say that Congress tourism has developed in recent years because of the weather conditions Antalya has, it is possible to spread tourism in 12 months. The ancient cities of Aspendos (Belkis), Side, Myra (Demre), Patara, kory Della (kumluca), Phaselis (Tekirova), Termessos, Sillyon (Çıralı), phoiapolis (şeyhköy), Selge (serük), Xanthos (Albeni and Ongun, 2005:101-102).

Table 4: Bed Capacity in Antalya

<table>
<thead>
<tr>
<th>Number of Facilities with Operation Certificate</th>
<th>Number of Rooms with Business Certificate</th>
<th>Number of Beds with Operation Certificate</th>
<th>Number of Investment Certificated Facilities</th>
<th>Number of Investment Certified Rooms</th>
<th>Number of Investment Certificated Beds</th>
</tr>
</thead>
<tbody>
<tr>
<td>791</td>
<td>209792</td>
<td>451950</td>
<td>96</td>
<td>21077</td>
<td>45539</td>
</tr>
</tbody>
</table>

Source: culture and Tourism Ministry, 2019

In Table 4, the number of facilities with operating certificates in Antalya is 791, the number of rooms with operating certificates is 209,792 and the bed sheet with operating certificates is 451,950. The number of facilities with investment certificates is 96, the number of rooms with investment certificates is
21,077 and the number of beds with investment certificates is 45,539. Antalya ranks first in terms of number of facilities with business certificate, number of rooms with business certificate and number of beds with investment certificate. After Antalya, Istanbul, Muğla and Izmir follow.

Table 5: Total Number of Passengers Arriving to Antalya Between 2014-2018 and Distribution by Nationality

<table>
<thead>
<tr>
<th>Nationality</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Russia</td>
<td>3,487,698</td>
<td>2,836,902</td>
<td>486,548</td>
<td>3,715,035</td>
<td>4,651,709</td>
</tr>
<tr>
<td>Germany</td>
<td>2,839,576</td>
<td>3,001,016</td>
<td>1,975,355</td>
<td>1,658,811</td>
<td>2,292,996</td>
</tr>
<tr>
<td>Ukraine</td>
<td>284,632</td>
<td>314,708</td>
<td>572,700</td>
<td>712,903</td>
<td>715,011</td>
</tr>
<tr>
<td>England</td>
<td>430,042</td>
<td>438,398</td>
<td>333,995</td>
<td>361,903</td>
<td>632,086</td>
</tr>
<tr>
<td>Polonia</td>
<td>243,549</td>
<td>240,641</td>
<td>100,824</td>
<td>168,702</td>
<td>383,230</td>
</tr>
<tr>
<td>Netherlands</td>
<td>489,820</td>
<td>434,842</td>
<td>306,280</td>
<td>257,546</td>
<td>374,237</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>269,221</td>
<td>268,389</td>
<td>125,927</td>
<td>237,244</td>
<td>244,528</td>
</tr>
<tr>
<td>Romania</td>
<td>84,150</td>
<td>97,994</td>
<td>90,489</td>
<td>116,172</td>
<td>192,788</td>
</tr>
<tr>
<td>Belgium</td>
<td>262,080</td>
<td>235,121</td>
<td>143,427</td>
<td>135,726</td>
<td>185,148</td>
</tr>
<tr>
<td>Israel</td>
<td>91,954</td>
<td>106,148</td>
<td>169,186</td>
<td>173,904</td>
<td>170,992</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>151,897</td>
<td>135,338</td>
<td>46,962</td>
<td>83,409</td>
<td>164,637</td>
</tr>
<tr>
<td>Belarus</td>
<td>142,176</td>
<td>137,951</td>
<td>70,943</td>
<td>163,686</td>
<td>163,677</td>
</tr>
<tr>
<td>Denmark</td>
<td>201,343</td>
<td>177,658</td>
<td>133,284</td>
<td>117,925</td>
<td>153,882</td>
</tr>
<tr>
<td>Swedish</td>
<td>355,894</td>
<td>313,122</td>
<td>140,467</td>
<td>95,525</td>
<td>152,693</td>
</tr>
<tr>
<td>Lithuanian</td>
<td>60,655</td>
<td>61,763</td>
<td>65,804</td>
<td>87,072</td>
<td>134,043</td>
</tr>
<tr>
<td>Slovakia</td>
<td>103,968</td>
<td>111,428</td>
<td>41,857</td>
<td>76,731</td>
<td>121,749</td>
</tr>
<tr>
<td>Switzerland</td>
<td>181,912</td>
<td>166,460</td>
<td>77,722</td>
<td>71,467</td>
<td>106,898</td>
</tr>
<tr>
<td>France</td>
<td>187,720</td>
<td>116,304</td>
<td>53,526</td>
<td>62,278</td>
<td>91,872</td>
</tr>
<tr>
<td>Austria</td>
<td>224,999</td>
<td>194,670</td>
<td>80,333</td>
<td>50,079</td>
<td>85,647</td>
</tr>
<tr>
<td>Norway</td>
<td>207,715</td>
<td>170,093</td>
<td>85,233</td>
<td>51,201</td>
<td>78,168</td>
</tr>
<tr>
<td>Moldova</td>
<td>53,234</td>
<td>58,672</td>
<td>45,869</td>
<td>66,789</td>
<td>75,600</td>
</tr>
<tr>
<td>Hungary</td>
<td>46,026</td>
<td>63,563</td>
<td>26,558</td>
<td>40,054</td>
<td>70,264</td>
</tr>
<tr>
<td>Iran</td>
<td>105,034</td>
<td>107,502</td>
<td>86,443</td>
<td>102,371</td>
<td>69,822</td>
</tr>
<tr>
<td>Finland</td>
<td>134,853</td>
<td>112,458</td>
<td>55,889</td>
<td>37,281</td>
<td>55,680</td>
</tr>
<tr>
<td>Iraq</td>
<td>11,348</td>
<td>28,185</td>
<td>15,593</td>
<td>46,988</td>
<td>45,970</td>
</tr>
<tr>
<td>Italy</td>
<td>32,666</td>
<td>28,041</td>
<td>10,808</td>
<td>10,945</td>
<td>17,681</td>
</tr>
<tr>
<td>K.K.T.C.</td>
<td>15,471</td>
<td>17,147</td>
<td>18,199</td>
<td>20,755</td>
<td>15,805</td>
</tr>
<tr>
<td>Slovenia</td>
<td>15,996</td>
<td>14,003</td>
<td>5,297</td>
<td>5,142</td>
<td>13,123</td>
</tr>
<tr>
<td>Other</td>
<td>405,750</td>
<td>446,581</td>
<td>368,889</td>
<td>496,843</td>
<td>699,423</td>
</tr>
<tr>
<td>T.C.</td>
<td>418,143</td>
<td>440,366</td>
<td>447,506</td>
<td>514,475</td>
<td>553,244</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>11,539,522</td>
<td>10,875,464</td>
<td>46,181,913</td>
<td>9,738,962</td>
<td>12,712,603</td>
</tr>
</tbody>
</table>

Source: Antalya Governorship Airport Regional Administration, 2019.
As seen in table 5, Antalya hosted 11,539,522 million foreign tourists in 2014, a decrease of 9,738,962 million tourists in 2017. In 2018, it rose again, welcoming 12,712,603 million tourists, breaking a record. The importance of the tourism sector for Antalya and the share of Antalya tourism in the Turkish tourism sector are shown. However, as can be seen from the table in 2016, there is a serious decline in the number of tourists, the primary cause of this decline is the plane crisis with Russia and the explosions in Turkey, as well as the wars in the Middle East are known. The war in the Middle East inevitably affects Turkey in a serious way.

**Subject of Research**

The tourism sector is increasing in importance every day in terms of the economy of the countries. Therefore, economic approaches are discussed in the research related to tourism. The subject of this research is the effects of films and series shot in Turkey on the tourism sector. Turkish series published in foreign countries are investigated how effective it is on incoming tourists. Turkish knees create a good image by arousing sympathy towards Turkey in the countries where it is published. Thus, it is considered to be effective on foreign tourists coming and it is considered appropriate to conduct research on foreign tourists coming to Antalya.

**Importance and Scope of Research.**

This study focuses on the effects of Turkish series and films on the tourism sector. Even a small detail that is ignored in the Modern world can lead to unnecessary spending of Labor, time and budget for marketing activity. Therefore, the academic studies on film and series tourism should be given
more importance and the unknown parts of this tourism branch, which is under the cultural tourism scheme, should be brought up on the day. It is possible to reach even large audiences that we can't reach with commercials through series and movies. Regional governments and operators have the opportunity to promote the region with destinations placed in series and films, as well as to increase the tourist demand for the region. But it is not clear which series and films contribute to the promotion of the region, how much influence it has on tourist decisions and which tourists influence it the most.

In the literature survey, we see that there are not enough academic studies on the subject as a whole, even if there are many academic studies on the impact of tourism on the Turkish economy. There are not enough academic studies on the impact of series and films on tourism in Film Tourism and destination selection. It was thought that Turkish series and films contributed to the Turkish tourism industry and therefore it was appropriate to conduct research on the subject. The aim of this research is to determine how the destinations placed in Turkish series and films have an impact on the choice of destinations for foreign tourists and to determine the attitudes, perceptions and tendencies of the tourists towards the destinations placed in the series and films.

**Method Of Research**

The population of this research is whether foreign tourists coming to Antalya are affected by the destination placed in Turkish TV series and films. The importance and scope of the research carried out under this subject as a priority has been addressed. Second, the survey method is mentioned under the subject of data collection and scales. Most of the questions in the survey are multiple choice questions. In order
to compare these questions with each other, SPSS 23 program Chi Square test was used. Then, information was given about the universe and sample of the research. The universe of the research consists of tourists coming to Turkey. However, because it is difficult and expensive to reach the entire universe, the sampling method was utilized and Antalya province, which is important for Turkish tourism, was chosen as the sampling method. Finally, the hypothesis of the research is given.

Data Collection Tool And Scales

In this study, which examined the effects of destinations placed in TV series and movies on the preferences of tourists during the destination selection phase, data was collected by the survey method. The survey consists of two parts. The first are questions asked to determine the demographics of tourists, and the second are questions asked to reveal the impact of destinations placed on TV series and movies on destination selection.

English Russian Persian and Russian languages have been translated from Turkish to Turkish, the survey has been translated into English, Russian and Persian languages. There are a total of 20 questions in the survey. The questions are intended to measure the demographic characteristics of tourists, perceptions of destination, attitudes, expectations and decisions. The first 6 questions of the survey are aimed at determining the demographic characteristics of tourists. 7th ed. Starting with question 13. The question is about measuring the expectation, perception, attitude and decision of the tourists about the destination. The remaining questions are 14. Starting with question 19. The question is aimed at measuring ideas and expectations about included TV knees and movies. 20, which is open-ended to the survey for the views respondents want to add. The question is attached.
Universe and Sample

The universe of this research consists of tourists coming to Turkey. Getting to the whole of this universe takes a lot of time, as it takes a high cost. Therefore, the simple random sample was chosen as the sample for the research by using the e method, as Antalya province welcomes the most tourists. In 2018, 12,712,603 people entered Antalya as foreign tourists (Antalya Government Airport administrative authority). When determining the sample diameter, 95% reliability and 5% sensitivity are taken. The diameter of the sample is Cochran (KOÇ BAŞARAN, 2017:493). The following formula is suggested by:

\[ n = \frac{t^2(p\cdot q)/d^2}{1 + (\frac{1}{N})^2(p\cdot q)/d^2} \times 100 \]

\[ n = \frac{3.8416(0.5\cdot 0.5)/0.25}{1 + (\frac{1}{12712603})^23.8416(0.5\cdot 0.5)/0.25} \times 100 = 384 \]

\[ n = 384 \]

N = number of individuals in the universe
n = number of individuals to be sampled
P = frequency of occurrence of the event to be examined
Q = frequency of absence of the event to be examined
t = the theoretical value found in Table t at a certain degree of freedom and at the determined level of error.
d = to be done according to the frequency of the occurrence of the event

Hypotheses Of Research

1. Hypothesis: H0: there is no difference of opinion on whether or not the serials have an effect on tourists coming to Turkey by gender
2. Hypothesis: H0: according to gender, tourists have no difference of opinion about the destination of interest in Turkey.
3. Hypothesis: H0: according to gender, their views on the story of the series and films shot in Turkey do not differ.
4. Hypothesis: H0: according to gender, tourist’s opinions about advertising and promotion in Turkish series and films do not differ.
5. According to the hypothesis: H0: tourists have no difference of opinion in the frequency of going to the movies.
6. Hypothesis: H0: according to gender, tourists have no difference of opinion about whether to watch Turkish TV shows broadcast in their country.
7. Hypothesis: H0: according to gender, tourists opinion on whether to watch TV shows do not differ.

Data Analysis And Findings

After checking the surveys we obtained, they were analyzed with the SPSS 23 program.

Demographics

In the first part of the survey, demographic factors such as the country, gender, age, education level, marital status and monthly income of the tourists will be discussed.

Table 6: Age Distribution of Tourists Findings (n = 384)

<table>
<thead>
<tr>
<th>Age Distribution</th>
<th>Number of Participants</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-20</td>
<td>65</td>
<td>16,9</td>
</tr>
<tr>
<td>20-29</td>
<td>138</td>
<td>35,9</td>
</tr>
<tr>
<td>30-39</td>
<td>79</td>
<td>20,6</td>
</tr>
<tr>
<td>40-49</td>
<td>66</td>
<td>17,2</td>
</tr>
<tr>
<td>50-59</td>
<td>25</td>
<td>6,5</td>
</tr>
<tr>
<td>60+</td>
<td>11</td>
<td>2,9</td>
</tr>
<tr>
<td><strong>Toplam</strong></td>
<td><strong>384</strong></td>
<td><strong>100,0</strong></td>
</tr>
</tbody>
</table>
As shown in Table 6, 16.9% of the participants were in the 0-20 age range, with the highest rate being 35.9% and 20-29 years old. Nevertheless, 20.6% are in the 30-39 age range, 17.2% are in the 40-49 age range, while 6.5% are in the 50-59 age range and 2.9% are over 60 years of age.

Table 7: Findings Regarding Male and Female Distribution of Participants (n = 384)

<table>
<thead>
<tr>
<th>Gender</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>154</td>
<td>40.1</td>
</tr>
<tr>
<td>Woman</td>
<td>230</td>
<td>59.9</td>
</tr>
<tr>
<td>Total</td>
<td>384</td>
<td>100.0</td>
</tr>
</tbody>
</table>

In Table 7, 40.1% to 154 people were men, while 59.9% to 230 people were women.

Table 8: Findings Regarding the Level of Education of the Participants (n = 384)

<table>
<thead>
<tr>
<th>Education level</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary education</td>
<td>14</td>
<td>3.6</td>
</tr>
<tr>
<td>High school</td>
<td>38</td>
<td>9.9</td>
</tr>
<tr>
<td>Associate Degree</td>
<td>82</td>
<td>21.4</td>
</tr>
<tr>
<td>License</td>
<td>147</td>
<td>38.3</td>
</tr>
<tr>
<td>Master and above</td>
<td>103</td>
<td>26.8</td>
</tr>
<tr>
<td>Total</td>
<td>384</td>
<td>100.0</td>
</tr>
</tbody>
</table>

In Table 8, the level of education of the participants is 3.6% with 14 people in primary education, 9.9% with 38 people in high school, 21.4% with 82 people in associate degree, 38.3% with 147 people in Bachelor’s degree and 26.8% with 103 people in higher education.
Table 9: Marital Status of Participants (n = 384)

<table>
<thead>
<tr>
<th>Marital status</th>
<th>Number</th>
<th>Percent %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>186</td>
<td>48,4</td>
</tr>
<tr>
<td>The married</td>
<td>162</td>
<td>42,2</td>
</tr>
<tr>
<td>Divorced</td>
<td>28</td>
<td>7,3</td>
</tr>
<tr>
<td>Living Together</td>
<td>8</td>
<td>2,1</td>
</tr>
<tr>
<td>Total</td>
<td>384</td>
<td>100,0</td>
</tr>
</tbody>
</table>

As from Table 9, 186 people were single, 42.2% were 162 married, 7.3% were 28 divorced and 2.1% were 8 living together.

Table 10: Income Status of Participants (ne = 384)

<table>
<thead>
<tr>
<th>Income rate</th>
<th>Number</th>
<th>Percent %</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-999$</td>
<td>216</td>
<td>56,3</td>
</tr>
<tr>
<td>1000- 2500$</td>
<td>77</td>
<td>20,1</td>
</tr>
<tr>
<td>2500- 3500$</td>
<td>65</td>
<td>16,9</td>
</tr>
<tr>
<td>3500- 4500$</td>
<td>15</td>
<td>3,9</td>
</tr>
<tr>
<td>4500$ and above</td>
<td>11</td>
<td>2,9</td>
</tr>
<tr>
<td>Total</td>
<td>384</td>
<td>100,0</td>
</tr>
</tbody>
</table>

As seen in the Table 10, and the income level of the respondents 56,3 getting 0-999$ while in second place % 20,1 income levels, with 1000-2500$ situated in between, still in third place by 16,9% and 2500-3500$ they then located participants with income levels % and 2,9 3,9 with income levels of 3500-4500 and$ 4500$ and the ones above is located.

Table 11: Expenditure Share of the Participants for Holiday (n = 384)

<table>
<thead>
<tr>
<th>Revenue from Vacation Share%</th>
<th>Number</th>
<th>Percent %</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 and bottom</td>
<td>65</td>
<td>16,9</td>
</tr>
<tr>
<td>5- 10</td>
<td>95</td>
<td>24,7</td>
</tr>
<tr>
<td>11 - 16</td>
<td>68</td>
<td>17,7</td>
</tr>
<tr>
<td>17- 20</td>
<td>62</td>
<td>16,1</td>
</tr>
<tr>
<td>21 and above</td>
<td>94</td>
<td>24,5</td>
</tr>
<tr>
<td>Total</td>
<td>384</td>
<td>100,0</td>
</tr>
</tbody>
</table>
In Table 11, 16.9% of respondents said that their income for holiday spending was 4% and below, with the highest proportion being 24.7% of respondents saying that they reserved between 5-10% of their income for holidays. At the same time, 17.7% of respondents indicated that they had earmarked between 11-16% of their income for the holiday. Respondents said they earmarked 21% of their income and above for holiday spending, compared to the second highest 24.5%.

Table 12: Distribution of Participants by Reasons for Travel (n = 384)

<table>
<thead>
<tr>
<th>Reason for Travel</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entertainment</td>
<td>287</td>
<td>74.7%</td>
</tr>
<tr>
<td>Festival</td>
<td>4</td>
<td>1.0%</td>
</tr>
<tr>
<td>Relatives visit</td>
<td>7</td>
<td>1.8%</td>
</tr>
<tr>
<td>Congress</td>
<td>24</td>
<td>6.3%</td>
</tr>
<tr>
<td>Business</td>
<td>54</td>
<td>14.1%</td>
</tr>
<tr>
<td>Shopping</td>
<td>8</td>
<td>2.1%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>384</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

As shown in Table 12, the biggest reason for visitors to Turkey is entertainment with 74.7%. Entertainment is followed by business with 14.1%, Congress with 6.3%, shopping with 2.1%, visiting relatives with 1.8% and festival with 1.0%.

Table 13: Participants interested in Turkey Attracting Top destinations (n = 384)

<table>
<thead>
<tr>
<th>Attraction Type</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural beauty</td>
<td>239</td>
<td>62.2%</td>
</tr>
<tr>
<td>Cultural and artistic activities</td>
<td>51</td>
<td>13.3%</td>
</tr>
<tr>
<td>Religious and Historical Monuments</td>
<td>25</td>
<td>6.5%</td>
</tr>
<tr>
<td>Hospitality</td>
<td>21</td>
<td>5.5%</td>
</tr>
<tr>
<td>Other</td>
<td>48</td>
<td>12.5%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>384</td>
<td>100.0%</td>
</tr>
</tbody>
</table>
In table 13, the most interesting destinations in Turkey are natural beauty with 62.2%, cultural and artistic activities with 13.3%, religious and historical works with 6.5%, hospitable with 5.5% and the other option with 12.5%.

Table 14: Participation Rate of Participants in Series and Film Tourism (n = 384)

<table>
<thead>
<tr>
<th>Expressions</th>
<th>Number</th>
<th>Percent %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Several times</td>
<td>49</td>
<td>12.8</td>
</tr>
<tr>
<td>Once</td>
<td>56</td>
<td>14.6</td>
</tr>
<tr>
<td>No</td>
<td>279</td>
<td>72.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>384</td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

When viewed in Table 14, the participation rate of the participants in series and film tourism is 12.8% several times, 14.6% once, and 72.6% never participated. Although participation in series and film tourism is considered low, overall 27% of respondents say they participate in series and film tourism, which is an extremely important figure.

Table 15: Factors for the participants to Turkey gelmelerineetkil Rank (n = 384)

<table>
<thead>
<tr>
<th>Factors</th>
<th>Average</th>
<th>S.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Originality</td>
<td>3.91</td>
<td>0.85</td>
</tr>
<tr>
<td>art and culture</td>
<td>4.09</td>
<td>0.79</td>
</tr>
<tr>
<td>Culinary Culture</td>
<td>4.02</td>
<td>0.90</td>
</tr>
<tr>
<td>Travel Services</td>
<td>4.03</td>
<td>0.87</td>
</tr>
<tr>
<td>Weather conditions</td>
<td>4.24</td>
<td>0.75</td>
</tr>
<tr>
<td>Rest</td>
<td>4.32</td>
<td>0.72</td>
</tr>
<tr>
<td>Religious Sites</td>
<td>4.00</td>
<td>0.91</td>
</tr>
<tr>
<td>Family Ties</td>
<td>3.94</td>
<td>0.94</td>
</tr>
<tr>
<td>Natural Environment</td>
<td>4.34</td>
<td>0.77</td>
</tr>
<tr>
<td>Social Factors</td>
<td>3.94</td>
<td>0.82</td>
</tr>
<tr>
<td>Cultural Factors</td>
<td>4.05</td>
<td>0.83</td>
</tr>
<tr>
<td>Technological Factors</td>
<td>3.81</td>
<td>0.88</td>
</tr>
<tr>
<td>Night life</td>
<td>3.81</td>
<td>1.03</td>
</tr>
</tbody>
</table>
In Table 15, when we look at the factors that most influence the visitors to Turkey, it can be said that the natural environment (x=4.34) is the most important factor. The natural environment is followed by 4.32 listening and 4.24 weather conditions. The factors that had the lowest share according to the answers of the respondents in the survey were value for money with 3.68, nightlife with 3.81 and technological factors with 3.81.

### Table 16: Factors Affecting After arriving to Turkey

<table>
<thead>
<tr>
<th>Rank participants (n = 384)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Factors</strong></td>
</tr>
<tr>
<td>Originality</td>
</tr>
<tr>
<td>art and culture</td>
</tr>
<tr>
<td>Culinary Culture</td>
</tr>
<tr>
<td>Travel Services</td>
</tr>
<tr>
<td>Weather conditions</td>
</tr>
<tr>
<td>Rest</td>
</tr>
<tr>
<td>Religious Sites</td>
</tr>
<tr>
<td>Family Ties</td>
</tr>
<tr>
<td>Natural Environment</td>
</tr>
<tr>
<td>Social Factors</td>
</tr>
<tr>
<td>Cultural Factors</td>
</tr>
<tr>
<td>Technological Factors</td>
</tr>
<tr>
<td>Night life</td>
</tr>
<tr>
<td>Value for money</td>
</tr>
<tr>
<td>Quality of Employees</td>
</tr>
<tr>
<td>Shopping Services</td>
</tr>
<tr>
<td>Economic Factors</td>
</tr>
</tbody>
</table>

*1- very bad, 2- bad, 3- middle, 4- good, 5- very good*
In Table 16, the most affecting factor for tourists after coming to Turkey is still the natural environment (X=4.33), the natural environment is followed by the same rate of Rest (X=4.33), the natural environment and the most affecting factor for tourists after listening was the weather conditions (x=4.28). The factors that least affected the participating tourists were the value of money (X=3.78) and the nightlife (X=3.83).

Table 17: Frequency of Participants to Watch Series Movies from Media, TV and Internet (n = 384)

<table>
<thead>
<tr>
<th>Expressions</th>
<th>Number</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Once a week</td>
<td>71</td>
<td>18,5</td>
</tr>
<tr>
<td>Two/three times</td>
<td>63</td>
<td>16,4</td>
</tr>
<tr>
<td>Once a month</td>
<td>104</td>
<td>27,1</td>
</tr>
<tr>
<td>Once every few months</td>
<td>102</td>
<td>26,6</td>
</tr>
<tr>
<td>No</td>
<td>44</td>
<td>11,5</td>
</tr>
<tr>
<td>Total</td>
<td>384</td>
<td>100,0</td>
</tr>
</tbody>
</table>

TV Series Watch Rate

<table>
<thead>
<tr>
<th>Expressions</th>
<th>Number</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Once a week</td>
<td>99</td>
<td>25,8</td>
</tr>
<tr>
<td>Two/three times</td>
<td>101</td>
<td>26,3</td>
</tr>
<tr>
<td>Once a month</td>
<td>76</td>
<td>19,8</td>
</tr>
<tr>
<td>Once every few months</td>
<td>58</td>
<td>15,1</td>
</tr>
<tr>
<td>No</td>
<td>50</td>
<td>13,0</td>
</tr>
<tr>
<td>Total</td>
<td>384</td>
<td>100,0</td>
</tr>
</tbody>
</table>

DVD And Internet Series Watch Rate

<table>
<thead>
<tr>
<th>Expressions</th>
<th>Number</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Once a week</td>
<td>119</td>
<td>31,0</td>
</tr>
<tr>
<td>Two/three times</td>
<td>88</td>
<td>22,9</td>
</tr>
<tr>
<td>Once a month</td>
<td>61</td>
<td>15,9</td>
</tr>
<tr>
<td>Once every few months</td>
<td>61</td>
<td>15,9</td>
</tr>
<tr>
<td>No</td>
<td>55</td>
<td>14,3</td>
</tr>
<tr>
<td>Total</td>
<td>384</td>
<td>100,0</td>
</tr>
</tbody>
</table>

*1- Once a week, 2- Two/three times, 3- Once a month, 4- Once every few months, 5- No
As shown in Table 17, 18.5 percent of the participants said they went once a week and 27.1 percent said they went once a month. 14.3% of respondents said they never went to the cinema. However, as shown in table 39, 25.8% of participating tourists say they watch TV shows once a week, with a small margin of 26.3% saying they watch TV shows once every two or three weeks. 13% of respondents said they had never watched a TV show. However, when the participating tourists are asked if they watch TV and Movies on DVD and internet, as can be seen in table 39, the highest rate is 31.0% once a week, 22.9% once a week and 14.3% say they do not watch at all. As a result, the participants say that a high percentage of tourists watch shows and movies from places such as the internet, TV and cinema.

Table 18: Opinion of Participating Tourists on Turkish TV Series and Films (n = 384)

<table>
<thead>
<tr>
<th>Expressions</th>
<th>Average</th>
<th>standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of players</td>
<td>3.62</td>
<td>0.85</td>
</tr>
<tr>
<td>Leading actors in movies and TV series</td>
<td>3.74</td>
<td>0.82</td>
</tr>
<tr>
<td>Place of withdrawal</td>
<td>3.87</td>
<td>0.86</td>
</tr>
<tr>
<td>Acquisition and promotion</td>
<td>3.39</td>
<td>1.0</td>
</tr>
<tr>
<td>Directed by</td>
<td>3.61</td>
<td>0.83</td>
</tr>
<tr>
<td>Stories and scenarios</td>
<td>3.56</td>
<td>0.95</td>
</tr>
</tbody>
</table>

*1- very bad, 2- bad, 3- middle, 4- good, 5- very good

Participants surveyed in Table 18 opinions about the series and movies taken by tourists in Turkey is examined, the factor they liked most of the film series and the shooting locations (X=3.87) when you come to in this order X=3.74 movie with lead actors and the series, X=3.62 the quality of players, X=3.61 directors, X=3.56 stories and scenarios and latest with X=3.39, followed by advertising and promotion.
Findings

In this study, Chi-square testing was used to determine the differences between the values. In general, Chi-square testing is applied to test whether the observed values conform to theoretical values, whether two samples with different properties are independent of each other, and whether the sample distribution is appropriate to a known distribution (Yağcioğlu, 2018:168).

The study found a difference in the destination of male and female tourists attracted to Turkey. Thus his H0 hypothesis is accepted. The views of women and men are not different about the goal that attracts their interest in Turkey.

1st. Hypothesis:H0: there is no difference of opinion about whether the sequences have an effect on tourists coming to Turkey according to their gender.

Table 19: visitors by gender, Series of Impact on whether or not the arrival of the Diversity of Opinion Turkey

<table>
<thead>
<tr>
<th>Gender</th>
<th>Yes</th>
<th>No</th>
<th>Total</th>
<th>$X^2$</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>26.1%</td>
<td>73.9%</td>
<td>100.0%</td>
<td>10.073</td>
<td>0.002</td>
</tr>
<tr>
<td>Woman</td>
<td>42.0%</td>
<td>58.0%</td>
<td>100.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>35.7%</td>
<td>64.3%</td>
<td>100.05</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As can be seen in Table 19, the person chi-square value is (=) and the p value is $p = 0.002$. There is a meaningful relationship between male and female visitors to come to Turkey and whether the series has an effect. since ($p = 0.002 < 0.05$), the hypothesis has been rejected. 26.1% of men and 42% of women say that Turkish TV shows are the reason why they come to Turkey.
**Hypothesis:** H0: according to the gender of tourists, there is no difference in the destination that attracts them in Turkey.

**Table 20: Gender by visitors, that interest in Turkey destinations Related Chi square test (n = 384)**

<table>
<thead>
<tr>
<th>Gender</th>
<th>Natural beauty</th>
<th>Cultural and artistic festivals</th>
<th>Religious and historical monuments</th>
<th>Hospitality</th>
<th>Other</th>
<th>$X^2$</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>64.7</td>
<td>13.1</td>
<td>5.2</td>
<td>2.6</td>
<td>14.4</td>
<td>5.406</td>
<td>0.248</td>
</tr>
<tr>
<td>Woman</td>
<td>60.6</td>
<td>13.4</td>
<td>7.4</td>
<td>7.4</td>
<td>11.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>62.2</td>
<td>13.3</td>
<td>6.5</td>
<td>5.5</td>
<td>12.5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As shown in Table 20, the person chi-square value was realized as ($X^2 = 5.406$). When we look at the value of P, it is realized as 0.248. since $p = 0.248 > 0.05$ is large, visitors’ opinions do not differ according to their gender about the destination that attracts their interest in Turkey. Thus, hypothesis has been adopted. Here, 64.7% of men and 60.6% of women say that natural beauty is the most interesting destination in Turkey. After this, 13.1% of men and 13.4% of women express their interest in cultural and artistic festivals in Turkey. However, 5.2% of men and 7.4% of women say that they are interested in religious and historical monuments in Turkey, while 2.6% of men and 7.4% of women say that they are interested in guest perversity.

**Hypothesis:** H0: participant’s opinions on the story of the series and films shot in Turkey do not differ according to their gender.
Table 21: Gender captured in Turkey by tourists on Array
And the story of the elephants Chi square test (n = 384)

<table>
<thead>
<tr>
<th>Gender</th>
<th>Very bad</th>
<th>Bad</th>
<th>Middle</th>
<th>Good</th>
<th>Very good</th>
<th>Total</th>
<th>X²</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>7,2</td>
<td>4,6</td>
<td>41,8</td>
<td>40,5</td>
<td>5,9</td>
<td>100,0</td>
<td>19.828</td>
<td>0.001</td>
</tr>
<tr>
<td>Woman</td>
<td>3,0</td>
<td>2,6</td>
<td>36,4</td>
<td>36,8</td>
<td>21,2</td>
<td>100,0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4,7</td>
<td>3,4</td>
<td>38,5</td>
<td>38,3</td>
<td>15,1</td>
<td>100,0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As seen in Table 21, the Pearson chi-square value is (=) and the p value is 0.001. P is significant because the value is less than 0.05. Thus, according to the gender of the tourists, opinions on the story of the series and films shot in Turkey differ. His hypothesis has been rejected. 5.9% of the male tourists surveyed said that the story of TV shows and movies shot in Turkey was very good, while 21.2% of women said that the story of Turkish TV shows and movies was very good. Again, 40.5% of male tourists and 36.8% of women say that the story of Turkish series films is good. The story of the Turkish series of male tourists is 41.8% medium, 4.6% bad, 7.2% bad. Of the female tourists, 36.4% are moderate, 2.6% are bad and 3% are bad.

Hypothesis: H0: according to the gender of tourists, their views on advertising and promotion of Turkish TV series and movies do not differ.

Table 22: Chi-square Test on Advertising and Promotion of Turkish TV Series and Films by Tourist Gender (n = 384)

<table>
<thead>
<tr>
<th>Gender</th>
<th>Very bad</th>
<th>Bad</th>
<th>Middle</th>
<th>Good</th>
<th>Very good</th>
<th>Total</th>
<th>X²</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>6,5</td>
<td>6,5</td>
<td>41,8</td>
<td>38,6</td>
<td>6,5</td>
<td>100,0</td>
<td>7.907</td>
<td>0.095</td>
</tr>
<tr>
<td>Woman</td>
<td>6,1</td>
<td>7,8</td>
<td>38,5</td>
<td>32,0</td>
<td>15,6</td>
<td>100,0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>6,3</td>
<td>7,3</td>
<td>39,8</td>
<td>34,6</td>
<td>12,0</td>
<td>100,0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
As shown in Table 22, The Chi-Square analysis results in pearson chi-square value ( = ). Perform 0.095 when looking at the same time value p. since the p value is greater than 0.05 (p=0.095>0.05), the opinions of tourists regarding advertising and promotion in Turkish series and films do not differ according to their gender. our hypothesis is accepted. The advertising and promotion of male tourists placed in Turkish series films are 6.5% very good, 38.6% good, 41.8% medium, 6.5% bad and 6.5% very bad. Of the female tourists, 15.6% said it was very good, 32% said it was good, 38.5% said it was medium, 7.8% said it was bad and 6.1% said it was very bad.

**Hypothesis:** 
H0: there is no difference of opinion in the frequency of going to the cinema according to the gender of the participants.

**Table 23: Chi-square Test Regarding the Opinions of the Participants about the Frequency of Going to Cinema by Gender (n = 384)**

<table>
<thead>
<tr>
<th>Gender</th>
<th>Once a week</th>
<th>Once every two/three weeks</th>
<th>Once a month</th>
<th>Once every few months</th>
<th>No</th>
<th>Total</th>
<th>X²</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>15.0%</td>
<td>17.0%</td>
<td>28.1%</td>
<td>26.8%</td>
<td>13.1%</td>
<td>100,0%</td>
<td>2.378</td>
<td>0.667</td>
</tr>
<tr>
<td>Woman</td>
<td>20.8%</td>
<td>16.0%</td>
<td>26.4%</td>
<td>26.4%</td>
<td>10.4%</td>
<td>100,0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>18.5%</td>
<td>16.4%</td>
<td>27.1%</td>
<td>26.6%</td>
<td>11.5%</td>
<td>100,0%</td>
<td>2.378</td>
<td>0.667</td>
</tr>
</tbody>
</table>

As can be seen in Table 23, The Chi-square analysis results in pearson chi-square value ( = ) and p value 0.667. Here, the hypothesis is accepted because the value of p is greater than 0.05. Participants ‘ opinions differ in the frequency of going to the cinema according to their gender. 18.5% of respondents said they went to the movies once a week, 16.4% said they went to the movies once a week, 27.1% said they went to the movies once a month and 26.6% said they never went to the movies.
As you can see, 90% of the participants say that they go to the cinema. Based on this, it is believed that the destinations placed in movies will reach large kits. Thus, curiosity is aroused by giving information about the destination placed in the films.

**Hypothesis: H0:** There is no difference of opinion about whether or not to watch the Turkish series broadcasted by tourists according to their gender.

Table 24: Tourists’ Views on whether or not to watch Turkish TV series published in their countries by gender 

<table>
<thead>
<tr>
<th>Gender</th>
<th>Yes</th>
<th>No</th>
<th>Total</th>
<th>(X^2)</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>32.7%</td>
<td>67.3%</td>
<td>100%</td>
<td>20.581*</td>
<td>0.001</td>
</tr>
<tr>
<td>Woman</td>
<td>56.3%</td>
<td>43.7%</td>
<td>100%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>46.9%</td>
<td>53.1%</td>
<td>100%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As seen in Table 24, pearson chi-square value \(X^2 = 20.581\^*\) was realized as a result of chi-square analysis and p value was 0.001. Here \(p = 0.001 < 0.05\) H0 hypothesis was rejected. There was a difference of opinion about whether or not to watch Turkish TV series broadcasting in their countries by gender. 46.9% of the respondents stated that they were watching Turkish TV series broadcasted in their countries while 53.1% said they did not.

**Hypothesis: H0:** According to gender, tourists’ opinions about whether to watch television series do not differ.
Table 25: Chi-square Test on whether or not tourists watch television series by sex (n = 384)

<table>
<thead>
<tr>
<th>Gender</th>
<th>Once a week</th>
<th>Once every two/three weeks</th>
<th>Once a month</th>
<th>Once every few months</th>
<th>No</th>
<th>Total</th>
<th>$X^2$</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>19.0%</td>
<td>24.8%</td>
<td>24.8%</td>
<td>16.3%</td>
<td>15.0%</td>
<td>100.0%</td>
<td>9.124*</td>
<td>0.058</td>
</tr>
<tr>
<td>Woman</td>
<td>30.3%</td>
<td>27.3%</td>
<td>16.5%</td>
<td>14.3%</td>
<td>11.7%</td>
<td>100.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>25.8%</td>
<td>26.3%</td>
<td>19.8%</td>
<td>15.1%</td>
<td>13.0%</td>
<td>100.0%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As it is seen in Table 25, the pearson chi-square value ($X^2=9.124^2$) and $p = 0.058$ were found as a result of the analysis. Since $P = 0.058> 0.05$, H0: hypothesis was accepted. There was no significant difference in whether or not tourists watch television by gender. 25.8% of the participants said that they watch TV series once a week, 26.3% once every two or three weeks, 19.8% once a month and 15.1% once every few months while 13% said they never watched.

Table 26: Percentage of Tourists Participating in Broadcasting of Turkish TV Shows and Films in their Countries (n = 384)

<table>
<thead>
<tr>
<th>Expressions</th>
<th>Number</th>
<th>Percent ( % )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>321</td>
<td>83.6</td>
</tr>
<tr>
<td>No</td>
<td>63</td>
<td>16.4</td>
</tr>
<tr>
<td>Total</td>
<td>384</td>
<td>100.0</td>
</tr>
</tbody>
</table>

As seen in Table 26, 83.6% of the respondents say that Turkish TV shows and films are broadcasted in their countries while 16.4% say they are not. While contributing to the economy by exporting Turkish serials of the cinema sector to many countries, it has inevitably contributed to the promotion of the country.
Table 27: Percentage of Participant Tourists Watching Turkish TV Shows and Films in their Countries (n = 384)

<table>
<thead>
<tr>
<th>Expressions</th>
<th>Number</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>180</td>
<td>46.9</td>
</tr>
<tr>
<td>No</td>
<td>204</td>
<td>53.1</td>
</tr>
<tr>
<td>Total</td>
<td>384</td>
<td>100.0</td>
</tr>
</tbody>
</table>

As can be seen from Table 27, 46.9% of the respondents say they watch Turkish TV series broadcasted in their countries while 53.1% say they do not.

Table 28: Participant Contribution of tourists to come to the Turkish series that Turkey Whether Percent (n = 384)

<table>
<thead>
<tr>
<th>Expressions</th>
<th>Number</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>137</td>
<td>35.7</td>
</tr>
<tr>
<td>No</td>
<td>247</td>
<td>64.3</td>
</tr>
<tr>
<td>Total</td>
<td>384</td>
<td>100.0</td>
</tr>
</tbody>
</table>

35.7% of respondents as shown in Table 28 of tourists coming to Turkey Turkish TV series and 64.3% say that the effect of that is to say to influence the Turkish TV series come to Turkey.

Table 29: Level of Influence of Destinations, Participating Tourists by Series and Films (n = 384)

<table>
<thead>
<tr>
<th>Expressions</th>
<th>Number</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Action</td>
<td>82</td>
<td>21.4</td>
</tr>
<tr>
<td>Science fiction</td>
<td>61</td>
<td>15.9</td>
</tr>
<tr>
<td>Voltage</td>
<td>13</td>
<td>3.4</td>
</tr>
<tr>
<td>Animation</td>
<td>9</td>
<td>2.3</td>
</tr>
<tr>
<td>Biography</td>
<td>15</td>
<td>3.9</td>
</tr>
<tr>
<td>Musical</td>
<td>26</td>
<td>6.8</td>
</tr>
<tr>
<td>Detective</td>
<td>6</td>
<td>1.6</td>
</tr>
<tr>
<td>Drama</td>
<td>63</td>
<td>16.4</td>
</tr>
<tr>
<td>Fear</td>
<td>15</td>
<td>3.9</td>
</tr>
<tr>
<td>Documentary</td>
<td>24</td>
<td>6.3</td>
</tr>
<tr>
<td>Fantastic</td>
<td>13</td>
<td>3.4</td>
</tr>
<tr>
<td>Romantic</td>
<td>57</td>
<td>14.8</td>
</tr>
<tr>
<td>Total</td>
<td>384</td>
<td>100.0</td>
</tr>
</tbody>
</table>
When the data in Table 29 is examined, it is seen that the most of the participating tourists are interested in the destinations placed in action films with 21.4%. After that, Drama with 16.4%, Science Fiction with 15.9% and Romantic with 14.8%. It is at the end of the crime ranking with 1.6%.

With the development of the cinema sector, the audience of films and series is increasing. Destinations placed in films and series attract the attention of the audience. People want to see the destinations they see in movies and series closely and travel to the places where they are filmed. As a result, it revives the tourism sector. In general, it can be said that serials and films have positive effects on the tourism sector. When the analysis of the survey data is analyzed, it is seen that Turkish serials have a positive effect on the tourism sector. Turkey aims to export close to $1 billion series. Immediately, immediately creating a good image of the Turkish series broadcast all over the world are attracting people’s interest in Turkey. 35.7% of survey respondents to our survey say that caused them to go to Turkey of Turkish TV series. It is known that in the Middle East countries, Central Asian countries and Balkan countries where Turkish TV series are watched, it not only creates a good image, but also arouses curiosity about the rich Turkish culture and makes Turkish goods a brand. In fact, as in my country, it is seen that Turkish goods are sold in high quality with the image of quality in Central Asian countries. In this study, 83.6% of respondents said that Turkish TV series were broadcast in their countries and 46.9% said they watched Turkish TV series in their countries. That is to say that it is effective about 36% of the Turkish TV series come to Turkey.

**Conclusion**

The tourism sector has an important role in the development and development of countries due to its socio-economic
characteristics. This sector directly or indirectly affects many sectors and revives the economy. Therefore, countries’ interest in tourism, support and expectations are increasing day by day. In an economy where the tourism sector is developing, its effects are felt both on the economy and in the social sphere. Tourism plays an important role in economic development by stimulating social, economic and cultural development, foreign capital inflow, increasing employment and providing foreign exchange inflow.

Turkey is to show the significance of the tourism sector until 1960. It is aimed to take the necessary measures for the development of the tourism sector in its five-year development plans, which has the characteristic of a development policy that has been implemented after these years. Turkey is planned to implement the principles of a mixed economy policy since 1963. The mentioned economic policy is a development and development policy. Their details are included in the five-year development plans. Development plans cover all the principles and tools that are needed to reach the objectives, to analyze the current situation, to analyze the objectives, to analyze the strategies.

With the removal of the 2634 law promoting tourism with important political decisions taken in 1980 is gaining momentum in Turkey’s tourism country. Turkey’s economic development plans with the decisions taken at the right can be seen that increasing development in tourism. Considering tourism phenomenon in the five-year development plan in Turkey, shows a similar development with global developments. In the first period, tourism sector is seen as an economic activity in development plans. In the short term, it is planned to take measures to increase tourism movements and economic benefits and to ensure the development of tourism industry. While mass tourism was initially targeted, the plans that were
taken later encouraged the geographical distribution of demand, decreased seasonality and encouraged small enterprises where local people could participate in the investments.

The elimination of the balance of payments deficit, the tourism industry is becoming one of the leading industries for Turkey, as in many developing countries. The potential of Turkey that it has unique natural resources and history is advantageous in terms of many countries. Turkish TV series that conquered hearts in recent years is an important role in the promotion of Turkey as a destination.

In particular, the Balkans, Central Asia and Middle East countries, the Turkish television series and films created by the best imaging preferences of tourists by creating sympathy for Turkey is seen to affect favour of Turkey. Nowadays, while a transformation process based on information and information technologies is taking place in the world, the different demands of the visitors change the structure of the tourism sector. Therefore, it is important that countries expecting from tourism produce goods and services for changing consumer demands and ensure that these products can be marketed. Turkey, on the one hand, while increasing its exports revenues with exports to that series and movies is to create a good image of tourism on the other side. Under increasing competition conditions, the position of image in destination marketing becomes clear. In this context, the effect of Turkish serials on the destination image and how the audience is determined to visit are examined in this study. And the result of the analysis made in the image of Turkey has changed thanks to the Turkish TV series and movies that are seen in a positive direction. These positive changes emerge in the natural beauty and historical sites placed in the series. Factors such as the story of the series and the leading actors appear to be influential in the positive change in the travel decisions of the participating tourists. It is seen
that thanks to the good image it creates, the series and films contribute to the tourism sector of the region or the country as a whole.

Series and films provide continuity to the country’s tourism. A film or television series can attract visitors to a region, city or country for many years. The majority of the tourists participating in the study stated that the unique natural beauty of the province is the reason for their arrival in Antalya. TV series and films are thought to be a factor that will positively affect Antalya’s image and increase respectability.

Thanks to films and tv series, it creates awareness and lasting impact that cannot be reached with traditional marketing methods for any destination. It is an important advantage that TV series and movies can reach a serious audience at the same time. With a positive perception of destination, it can be seen that the tourist to the destination has increased. Therefore, it is necessary to benefit from the phenomenon of film and series tourism against Antalya. Special in the region referred to as the natural beauty of Antalya, Turkey in general for the promotion of domestic and foreign producers should be encouraged. When the natural and historical characteristics of Antalya are correctly reflected, it is seen that the regional tourism will increase further.

In this research, it is tried to determine whether the foreign tourists coming to Antalya are affected by the destinations placed in Turkish TV series and films. In this context, 384 surveys are conducted for the purpose of revealing the effects of Turkish serials and films on foreign tourists coming to Antalya. In summary, the following results are obtained from the analysis of the demographic distribution of the participating tourists and the determination of the effects of the series.

When the demographic findings of the tourists participating in this study are examined, it is seen that most of the participating tourists are young and middle age. It is also noteworthy that most of the respondents were women. When education levels are
examined, it is important that they are mainly undergraduate and graduate. Looking at the marital status of tourists, 48.4% consists of single people, 42.2% are married, 7.3% divorced and 2.1% live with someone. When the reasons for travelling of tourists are examined, it is seen that most of them stated that they travel for entertainment. Again, 87% of the respondents stated that they watched television, while 46.9% said they watched Turkish TV series broadcasting in their countries.

When the gender of the participants was examined, 56.3% of the women said that they watched Turkish TV series in their countries, while 32.7% of men said they watched Turkish TV series in their countries. As can be seen from here, it is seen that most of the audience of Turkish serials are women. As a whole, the participants in coming to Turkey made when Turkey array of asked whether this is effective analysis revealed that women from 42% to come to Turkey in 35.7% of men said that to be effective the Turkish TV series and movies Turkish TV series and movies is effective to arrive in Turkey. It is seen that.

In summary, series and film tourism is extremely important for destinations, as it offers the ability to add charm without season discrimination, which extends the tourism season. For this reason, it should be ensured that the series and film industry prefer Antalya; thus, it should be aimed to contribute to Antalya tourism and economy throughout the year, not seasonal. In addition, the unique and attractive natural beauty of Antalya in terms of introducing the effects of the series and movies are clear. Campaigns carried out in cooperation with the film industry are a source of motivation for those who want to travel with the effect of the films they watch. Accordingly, encouraging national and international filmmakers to make films and TV series in order to benefit more from the effects of tourism sector in the long term will play an important role in promoting Antalya’s unique natural beauty as a destination.
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