

## **THE RELATION BETWEEN THE FEAR OF COVID-19 PANDEMIC, THE USE OF DIGITAL CHANNEL AND THE USE OF SOCIAL MEDIA**

**Gül EKİNCİ<sup>1</sup>**

**Burhan AKYILMAZ<sup>2</sup>**

### **ÖZET**

Bu çalışmada ilk kez Aralık 2019'da görülen ve tüm dünyayı etkisi altına alan özel bir aşı veya tedavisi bulunmayan yaklaşık Eylül 2020 tarihi itibarıyla bir milyona yakın ölüme neden olan Covid-19 (WHO, 2020a) küresel salgının tüketici davranışı üzerindeki etkisi araştırılmıştır. Covid-19 Pandemi sürecinin tüketiciler üzerinde Covid-19 korkusu (genel korkusu ve aktivite korkusu), sosyal medya kullanımı (instagram, twitter vb) ve dijital kanal kullanımı (online bankacılık, online ödeme, sanal kart, sanal cüzdan, online alışveriş siteleri) arasındaki ilişki test edilmiştir. Bu bağlamda Türk tüketicilerle ilgili az sayıda çalışmanın olduğu konuyla ilgili olarak sosyal ağlarda (Twitter, LinkedIn) paylaşılan bağlantı aracılığıyla likert ölçeği ve açık uçlu sorular kullanılarak online anket formatında Google Form anket portalı üzerinde elde edilen 385 verinin Google Form ve SPSS programında (Anova, Regresyon) analizi yapılmıştır. Yapılan analizler sonucunda korku(genel korkusu ve aktivite korkusu), sosyal medya kullanımı (instagram, twitter vb) ve dijital kanal kullanımı değişkenleri arasında anlamlı ilişkiler bulunmuştur. Araştırma sonuçlarına göre, tüketicilerin Covid-19 korkusu arttıkça dijital kanal kullanımı (online bankacılık, online ödeme, sanal kart vb, online alışveriş) ve sosyal medya kullanım oranı arttığı sonucuna varılmıştır.

**Anahtar Kelimeler:** Covid-19, Pandemic, Customer Behavior, Fear, Digital Channel, Social Media

**Jel Kodları:** D12: Costumer Economics: Emprical Analysis, I:Helath, education and Welfare, M31: Marketing, Z1: Cultural Economics, Economics Sociology, Economic Anthropology, R2. Houseld Analysis

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<sup>1</sup>gulcex34@hotmail.com, (ORCID: 0000-0001-5512-4789)

<sup>2</sup>burhan.akyilmaz@gmail.com, (ORCID: 0000-0003-4039-9442)

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### **ABSTRACT**

In this study, the effect of the global epidemic of Covid-19 (WHO, 2020a), which was first seen in December 2019 and caused nearly a million deaths on September 2020, without a special vaccine or treatment that affects the whole world, on consumer behavior was investigated. In this study, the relation between the fear of Covid-19 pandemic process on consumers (general fear of the virus and fear of activity), the use of social media (instagram, twitter etc.) and the use of digital channel (online banking, online payment, virtual card, virtual purse, shopping websites) has been tested. In this context, 385 data that have been obtained via Google Forms survey portal in online survey format by using Likert scale and open-ended questions through the link shared on social networks, (Twitter, LinkedIn) where there are few studies with Turkish consumers, have been analyzed in Google Form and SPSS programmes (Anova, Regression). At the end of the analysis, meaningful relations have been found between the variables of fear (general fear of the virus and fear of activity), the use of social media (instagram, twitter etc.), and the use of digital platform. According to the results of the research, it was concluded that the more consumers' fear Covid-19 increased, the more the rate of digital channel usage (online banking, online payment, virtual card, online shopping) and social media usage increased.

**Keywords:** Covid-19, Coronavirus, Pandemic, Customer Behavior, Fear, Digital Channel, Social Media

**JEL Codes:** D12: Costumer Economics: Emprical Analysis, I: Health, education and Wellfare, M31: Marketing, Z1: Cultural Economics, Economics Sociology, Economic Anthropology, R2. Houseld Analysis

## INTRODUCTION

Humankind, throughout history, has experienced global epidemics, disasters and crises. Humanity has had to reshape his politics, production, consumption, the reasons and ways of his working, his beliefs and values due to global epidemics, disasters and crisis he has gone through (Sneath, Lacey, & Kennett-Hensel, 2009). This wave of change has naturally reflected on behaviours and habits and it will be continuing to do so. The devastating and constructive (in terms of innovation) effects of epidemics and disasters appear in behaviours by means of mirroring. Attitudes and behaviours expose to deviations under the influence of crisis or malfunctions and therefore, they cause deep social changes in the long term. The black death leded the Enlightenment in Europe by ending feudalism and slavery in the fourteenth century; the Second World War paved the way for women for their entering into work-life; the terrorist attacks of 9/11 caused high-level screening and surveillance and 2003 SARS epidemia directed people into e-trade (Reeves, 2020). This case has been continuing from past to today and it is seen that the Covid-19 pandemic that has been world-wide affective since December 2019, has initiated similar winds of global change, too and also that this process will continue.

The general assumption is that the deep influence Covid-19 has created on consumers' behaviours, will continue to show up not only during the process but also after the process (Sneath, Lacey and Kennett-Hensel 2009, Larson and Shin 2018). Among various foresights, one prevails that the pandemia, in the new-normal, will develop new generation consumer behaviours and marketing activities in order to prioritize well-being and health of the public and by this way, it will leave deep socio-psychological and socio-economic traces (Fortin ve Uncles, 2011).

The new Covid-19 virus is a RNA virus that belongs to the Coronaviridae-Nidovirales family. Caused by the virus, the Covid-19 disease is accepted as one of the biggest pandemics (global epidemics) in world history that governments have globally struggled against at individual and social levels (WHO, 2020a). While Covid-19 is affecting people's healths on one side, it is considerably affecting people's education, politics, way of thinking and interacting and consumption habits on the other side. This process has forced consumers and trademarks to decide on what role they need to play and also forced them to quickly put their decisions into practice in this time of uncertainty by introducing them a new culture named 'Pandemic Culture'. It seems that the process will continue to keep them forcing. Researches point out that during the pandemic, both consumers in developing markets and customers in the same segment in mature markets have been affected differently and that there are only few researches related to Turkey (Ekici, 2020:101-103; Ekinci ve Akyılmaz; 2020:89; Morgan, 2020). This study has been put forward in order to contribute to the lack of information in this field and to determine to what extent consumer habits have changed or not during the pandemic. Taking the differences that have emerged as a result of the Covid-19 pandemic into consideration, this

study has aimed to measure the effects and changes on consumer behaviours in the transition period from the old normal to the new world order. The research to be conducted in Turkey gives importance to the pioneering work of the first detailed studies.

When the pandemic is thought in perspective of companies, it seems probable that ‘marketing strategies’, which is the same as what ‘life support units’ mean in hospitals, will let ‘Heroes and Zeroes’ come out, which have stood by consumers in the economic pandemic war during the Covid-19 process (Fish, 2020). It is thought that there are two inevitably possible results, one being that ‘Zeroes’ will lose their lives or they will struggle to survive in a way and the second being that ‘Heroes’ will maintain their lives with more power.

### **1. LITERATURE**

The wind of Covid-19 pandemic that has affected the world by economically (Dineri & Çütçü, 2020) also took hold of consumer behaviours. When this effect is evaluated in terms of the market and the consumer, it has reduced the predictability in demand and activities on the way to uncertainty as it makes adaptation difficult (Çelik & Mazlum, 2017). Among consumer behaviours expected during and after the process there are emergence of new habits, disappearing of some of them, return of some of them and modification of some of them. ‘According to consumer universal principle, if a compulsory need is abandoned, that need comes back to life as a hobby or an entertainment (hunting, fishing, making bread, cooking etc) (Sheth, 2020).

Covid-19 has been causing differences on consumer behaviours and it has been making way for influence and changes at every segment level. Every nine consumers out of ten think the pandemic will affect all countries greatly and deeply (GWI, 2020:7). In a research that was carried out in Harvard Business School in March, 2020 among 12000 consumers in twelve countries involving Brazil, South Africa, Italy, France, England, Germany, South Korea, Canada, China, the USA, Japan and India, %33 of the consumers stated that they punished trademarks, which didn’t reply to consumers as needed, %65 of them stated that they would change their post-pandemic buying habits according to the reactions that trademarks would give against the crisis, and %71 of them stated that they would remove trademarks prioritizing their profit margin more than human during the pandemic out of their life forever. Additionally, while %90 of the consumers emphasized that they believed trademarks should consider and endure financial losses in order to protect social prosperity and health %35 of them emphasized that they started to use a new trademark as a result of marketing activities (Avery ve Edelman, 2020). Findings of the research show that the process during the Covid-19 pandemic is not very different from the ones that humankind has seen before and they also show that reflections of changes and shifts reasoned by pandemics and crisis on consumer attitudes and

behaviours still continue. People, in panic, turn towards health and healthy products by delaying their buying habits like clothing, household goods, luxurious products and holiday (GWI, 2020:8).

In a research carried out by BCG among 14473 consumers in 11 countries (France, Germany, Italy, the USA, Brazil, China, India, Indonesia, the Philippines, Russia and Thailand), it has been found out that consumers at the same segment level in both developed and developing markets are affected at different amount, rate and forms in terms of thinking, understanding, ways of work and behaviour. In developing countries, a sharp increase has been observed mostly at health products, personal care, packaged good, household goods and fresh food. In both markets, an increase in purchase of fresh good, protective care, household goods; and leaving purchases of travel and luxurious products on hold, have been observed (Bharadwaj vd., 2020). In a research carried out again by Koslow and his friends on the side of Asia Pacific, it has been determined that while consumers generally avoid travel, decoration and automotive, clothing, food shopping outside, free time activities, public places and flights, they create increase in online shopping, clothing, cosmetics, fresh and frozen food (Koslow vd., 2020b).

Market consumers in developing Brazil, China, India, Indonesia, plan to increase their post-pandemic spendings more than their equivalents in developed markets such as France, Germany, Italy and the USA. While more consumers aim to reduce their spendings in developed markets, developing markets aim to increase their spendings. In a different saying, it has been found out that consumers in developing markets plan to spend more and they are more optimistic about the future of economy when compared with the ones in developed markets. Participants mostly worry about being infected by the virus, recession in economy, increase in prices, environmental cleaning and personal security. (Bharadwaj vd., 2020).

In a research carried out in Asia Pacific again by Koslow and his friends, it is emphasized that consumers in Australia, Japan and India have changed their daily lives ( between %73 and %85). While Japan is the top-ranked country in believing that the worst days of coronavirus have not been lived yet, China, in comfort of being the first to have been infected, is ranked the last (%26) among those who believe that they are in recovery process and the worst days of the virus has not been lived yet (Koslow vd., 2020b).

It is seen that people are in fear in many countries. The study carried out by a team of fourteen in Harvard Business School among more than 110.000 online users in 175 countries at the end of March and beginning of April, supports the findings of Bharadwaj and his friends (2020), and Koslow and his friends (2020b). In the study, it has been observed that citizens and governments believe that they haven't fulfilled things to be done against the virus and as a negative result of these attitudes and behaviours, there is an increasing level of fear and depression that participants have (Fetzer vd., 2020).

It has been detected that increasing fears have reflected on consumer behaviour irrationally and emotionally and surpassed other fundamental needs. For instance, in a survey made among 1088 people in May in the USA, it has been revealed that while fear of being infected and economic effect and anxiety are ranked as first and second among primary concerns, fear of being unable to see family and friends is ranked third among primary concerns. By this way, it has been determined that the concern of being unable to see family and friends has surpassed the concerns of meeting fundamental and other needs, not receiving education, delay of plans and negative influence on the occupation. (Numerator Intelligence, 2020b). Consumers in Australia have equally added nonbasic purchases to their basic purchases in online shopping. It has been seen for the first time that nonbasic needs entered to the list of the first best twelve in online buyings together with basic needs. (Koslow vd., 2020b).

These results support panic buying that Paul Marsden mentions and also that people act irrationally with survival instincts due to fear at the times of crises and their reptile brains are dominant in buying habits as it happens in other times of making decision (Xiao, Zhang & Zhang, 2020).

Together with this, it has been found out that only in March in the USA, nine consumers out of ten changed their consuming and buying habits in order to fulfill the natural requirements of a pandemic, which are self-isolation and protection. In addition, for the last six months, the rate of online order have reached to %8 for the first time and the rate of those doing online shopping for the first time has reached to %5 (Numerator Intelligence, 2020a). In the study carried out among 1088 consumers in May, the behaviours of online shopping, stockpiling and eating out have been on the rise and the study also showed that the rate of those who ordered online, reached %11 for the first time in the last six months and the number of the those who used click and collect and stated they used online market service, reached 10,3 million household while this number reached to %39 at age group of 60 and over it. Corresponding with change of consumers' interests and field of concerns, half of consumers stated that almost all of the advertisements they saw was related with Covid-19. (Numerator Intelligence, 2020b; Redman, 2020). It is seen that changes in the new world have reflected to pop-ups and also they continue to attract new users by orientating new conditions.

In England, compared with the last year, while there has been increase in house renovation (+%6), technological needs (+%48), online green grocery service +%136, and insurance +%13, there has been decreases in woman clothing -%65, property buying and renting -%33. Similarly, in France, retail business has showed +%15-20 growth and in Italy, e-trade grewed by +%170 (Numerator Intelligence 2020a, 2020b; GWI, 2020).

It has been determined that there has been an extraordinary increase in online shopping in Turkey like in other countries and that bread machine has been the best-selling product while travel

products like luggage have been the least-seller and also products of hygiene have been among the mostly-bought categories. It is probable that tactile marketing, which is expected to face decrease, might lose its position to sensory marketing in luxury consumption (Işın, 2020a). It is seen that the most negatively affected sectors are airways, tourism and automotive products (Işın, 2020b). In a study that was carried out by Baskent University in May, 2020, it has been found out that demand for domestic products has been on the rise, which is more performed by women rather than men. In the study, this significant increase in demand of domestic products, like in all countries, is based upon the reasons of difficulties in supply chain and lowering of international trade the level of zero (Işın, 2020c).

Koslow and his friends, in another study that they carried out in April 2020, found that there are similar attitude and behaviour patterns between different generation and age groups in key aspects together with consumer behaviour changes. It has been revealed that calm life, which generation X is accustomed to, has been interrupted by little children at home, and millennium generation (generation Y) has been isolating themselves from integrative activities and finally generation Z has been going through a period, in which they feel worried about financial conditions and their future expectations. While mature generations feel more confident in terms of their personal financial security and power of their savings and therefore behaving sufficiently and optimistically, young people in Z and millennium generations exhibit positive attitudes regarding that economic outlook will change for the better and by this way they will be able to return to their usual spending habits quickly after the pandemic. While this differentiation causes elderly generations to maintain their usual spending, it causes generations Y and Z to wait for spending and make plans to stay balanced, however; this phenomenon is not seen in the same way in developing countries. (Koslow vd., 2020a).

The level of anxiety of consumers regarding the global situation is higher than it seems for national cases, and together with this, while optimism has been increasing China, New Zealand, Australia, Germany and South Africa; it has been decreasing in France, Italy, Singapore and Spain (GWI, 20207). When the grandscheme of things in the whole world during Covid-19 is considered, consumers generally tend to exhibit fast and different changes between the country and demanded product related with purchase habits and consumption patterns. In this perspective, companies need to closely follow these changes in order that they can balance their market demands and budgets and also that they can create new working fields during the Covid-19 crisis period (Bland vd., 2020).

### **1.1. COVID-19 (CORONAVIRUS(Coronaviridae) DISEASE-2019)**

Coronaviruses being the main pathogenics of respiratory pandemics that involve a single RNA, are known as viruses, which cause the symptoms of the diseases of Sharp Acute Respiratory

Tract (SARS-CoV) and Middle East Respiratory Tract (MERS-CoV). Showing the symptoms of temperature, cough, dyspnea and difficulty in breathing, pulmonary infection etc, the Covid-19 was identified in Wuhan city of China for the first time as a new virus that is related to the same virus family as sharp acute respiratory tract sendrome (SARS) and some types of common cold. It was temporarily named as 2019-nCoV when it first appeared. International emergency case announcement was made by the WHO on January 30, 2020 and it was identified as a new coronavirus on the date of February 11, 2020 causing the declaration of it as pandemic and it has affected more than 150 countries (WHO, 2020a).

It has been the third time in the last 30 years that the coronavirus family has confronted the world with pathogens that cause pandemic in the names of SARS-CoV, MERS-CoV and Covid-19. Previously, the family was reported as Sharp Acute Respiratory Sendrome (SARS-CoV) in November, 2002 in China and later, the cases of MERS-CoV were reported after September 2012 in 27 countries. (WHO, 2020b, 2020c).

At the date period this study has been going on, as of June 25, 2020, nearly half a million (485.615) people died, 5.197.927 people were saved and totally 9.557.571 cases of Covid-19 were confirmed (Worldometer, 2020). Almost half of these cases are the ones that were diagnosed in the USA (the USA 4,279,854; Europe 2,527,618; the Eastern Mediterranean 897,403; Southeast Asia 580,533; the Western Pacific 204,860) (WHO, 2020d). During the three months before the date June 21, 2020, the total number of cases diagnosed in Turkey was announced as 185,200 and the death toll as 4,900 (WHO, 2020e). When the daily statistics are considered, it does not seem possible for a pandemic taking place on such a large scale like Covid-19 that it will leave demographic socio-cultural features and consumption habits together with people's health unaffected. In order to develop new generation marketing strategies for the well-being of society in the new normal, it is essential that possible financial losses beendured, the waving in online buying habits be examined and consumer habits be analysed very carefully.

## **1. 2. THE INFLUENCE OF THE COVID-19 PANDEMIC CULTURE ON CONSUMER HABITS**

It is seen that consumer behaviours are usually located at the focus point of marketing research and the influence of many other factors (demographic characteristics, risk, anxiety, quality etc.) are also examined (Peels et al., 2009, Ekinçi ve Aytekin 2012, Foroughi et al., 2013). It is accepted that the factors affect consumer behaviours at the rate of %5 at conscious level and % 95 at the subconscious level, which comes to mean that humankind has an emotinal mechanism that gives decisions with his primitive brain (reptile). Therefore, it may be thought as a usual process that sudden physical and emotinal actions triggering the reveal of these factors will create the same affect.



Consumers react crises in panic and instinctively in different ways. They behave irrationally and emotionally with survival instinct. With a similar affect, the Covid-19 process fundamentally changes the habits of thinking, behaving and consuming. While these reactions are said to be behaviors that are revealed by fear of missing out and bandwagon (follow the crowd) effect (Genc, 2020), they are identified as 'Panic buying' by Paul Marsden, who is a consumer psychologist at the University of Arts.

Panic buying is identified as the buying act to meet three main psychologic needs: autonomy (the feeling of everything is under control), being helpful (the feeling of being helpful for family) and the feeling of competence (comparing with others, being a smart consumer) (Meyer, 2020). Depending on these need, consumers develop new and different habits about what amount, when and where they will consume products (Sheth, 2020). Large spikes in demand for storable goods like toilet paper craze, unusually high demand for Essentials like bread have been observed between consumer (Lufkin, 2020).

### **1.2.1. The Covid-19 Fear of Consumers, Their Use Of Digital Channel and Social Media**

Consumer behaviour is among the phenomenon topics of market research. Many different studies that help in explaining consumer behaviour are based upon different reasons, and hedonic, pragmatic and emotional reasons lie behind consumption behaviour (Leverin & Liljander, 2006; Yu & Bastin, 2010; Addo et al., 2020:473). Especially when consumers reach the peak in feelings of missing opportunities, deprivation and famine at the times of disasters and pandemics, this causes changes on attitudes and behaviours of society revealing psychological and physiological needs (Arafat et al, 2020). The principle of famine that reaches the peak during the times of disaster in something increased pandemic, drives consumers into more action. Especially fear triggers panic behavior. While general desires to obtain when it is in short amount or limited, this case simultaneously motivates even the uninterested people so much as to act, and also it makes limited one look more valuable and the idea of potential loss plays a greater role in deciding. With a different saying, the feeling of losing something and fear motivates people more than the feeling of winning something. The reasons of this motivation are explained by that people don't want to lose when they take risks and also that rarity turn into strong emotions by its being perceived as an indicator of quality. This universal principle is accepted valid for human behaviour spectrum from mate selection (It is named as Romeo and Juliet Effect), to negotiation tactics and marketing (Lidwel et al., 2006; Cialdini, 2006; Mehra, 2020).

#### **1.2.1.1. Fear (Fear of Activity, General Fear of The Virus)**

Fear is known as an emotion that promotes buying behavior. The Fear Appeal theory contains fearful persuasive messages that marketing professionals use very well. One of the responsible factors of panic buying is fear (Arafat, et al, 2020) and fear is known as a the key and panic buying is the therapy (Mehra, 2020). Basically, fear includes two types of behavior as "danger control" and "fear

control". However, in the Covid-19 period, it is seen that "danger control" in the form of avoiding and dealing with danger is valid. Emotional reactions for "fear control" are not yet possible, as Covid-19 has no cure yet. Therefore, the most reasonable response to avoid this epidemic wind (Addo et al., 2020) can be considered as "Fear of activity" and "Fear of the Virus". According to the limited access principle, people can not take analytical decisions due to panic when they can not reach something or have limited access to it. People have difficulty in controlling their emotions when threatened by opportunities and freedoms and while they want to try and have this material more than usual, they head for hedonic and pragmatic rush buying at the same time, which is triggered by panic and fear; therefore causing irrational consumptions (Cialdini, 2015; Sneath, Lacey, & Kennett-Hensel, 2009). It is seen that consumers buy utilitarian products at high levels (Forbes, 2016). This can be exemplified by toilet paper, dry food, water madness in the Covid-19 pandemic process.

While consumer behaviours are usually predictable and modelable behaviours, they may change depending on social events (income, moving etc.), technology (smart phone, internet, e-trade), prohibitions and regulations, and temporary natural disasters such as earthquakes, tsunamis, whirlwinds and pandemics (Sheth, 2020). Similarly, 'uncertainty' and 'fear' that is triggered by survival urge, lie behind the factor motivating consumers during the Covid-19 pandemic process (Witte & Allen, 2000; Addo et al., 2020:473). Kahneman, who received Nobel 2002 Economy Reward, tried to explain in 'Theory of Uncertainty' that decisions made under uncertainty are not rational so letting intuition and prejudice get involved (Kahneman ve Tversky, 2002). In the researches carried out during the Covid-19 pandemic process, the third rank of the concern of being unable to see family and friends among primary concerns, which gets ahead of the concern of meeting fundamental and other needs, give support to this irrational decision making theory (Numerator Intelligence, 2020b).

Consumption fields, in which uncertainty, changefulness, loss of balance and fear have been experienced related to the Covid-19 pandemic, can be named as dry food, medical products, mask, cleaning and disinfection products, digital technologies etc. Together with this, it is seen that people delay their buying behaviours such as clothing, household appliances, luxurious materials and holiday by prioritizing health and healthy products due to the mode of fear and panic (GWI, 2020:8; Işın, 2020a). It has also been observed in this process that the fear of being infected, recession, increase in prices, environment cleaning and personal security issues make consumers worried (GWI, 2020:8; Işın, 2020a), and that the levels of fear and depression have increased (GWI, 2020:8; Işın, 2020a).

In this study, the relation between the pandemic of Covid-19 and fear (fear of activity, general fear of the virus) has been tested. Regarding this, the first hypothesis of the study:

**H1:** There is a relation the Covid-19 pandemic and fear.

**H1a:** There is a relation between the Covid-19 pandemic and fear of activity

**H1b:** There is a relation between the Covid-19 pandemic and general fear of the virus.

### **1.2.1.2. The Use of Digital Channel ( Online Banking, Online Payment, Virtual Card andetc., Online Shopping)**

Studies show that consumer behavior changes suddenly after a large-scale disaster and this change has a long-term effect (Forbes, 2016). According to the consumer universal principle, it is known that when people give up on a compulsory need, it comes back to life as a need, hobby or an instrument of entertainment or it is modified. It is seen during the Covid-19 pandemic process that such a need, which has been renewed or modified, is ‘the use of digital channel (online banking, online payment, virtual card and etc., online shopping)’. That non-compulsory needs have entered to the list of the first best twelve in digital buying categories for the first time together with compulsory products supports that the use of digital channel has been modified (Koslow vd., 2020b). Intensive need for online shopping and digital channels, which bring the store to customers that can not go to the store, is found very attractive (Sheth, 2020, Koslow vd., 2020b). According to GlobalWebIndex, the use of digital channel has been increased by e-trade and online shopping behaviours, and also duration, variety and amount of consumption has changed, causing increased online traffic. It is seen that there is positive growth in the sectors that are related with home and living areas while some sectors are affected negatively. For instance, e-trade per week has grown %52 and sales in entertainment, game, TV, film, music and books has increased %70 (Pica, 2020). In the USA, the behaviour of consuming and buying changed %90 during March and it is seen for the first time that the rate of the number of online shoppers has reached to %5 (Numerator Intelligence, 2020a) while this rate has reached to %39 for over 60 age group (Numerator Intelligence, 2020b). It has been determined that online green grocery service in England has increased +%136, e-trade in Italy has increased +%170 and online shopping in Turkey has had an extraordinary growth (Işın, 2020a).

In this study, the relation between the Covid-19 pandemic and the use of digital channel has been tested. Regarding this, the second hypothesis of the study is:

**H2:** There is a relation between the fear of Covid-19 and the use of social media.

### **1.2.1.3. The Use of Social Media (The Use of Social Media, Reading Online News, Online Film, Video Payments)**

It is seen that one of the fields that has been renewed and modified during the Covid-19 pandemic process has been the use of social media. According to GlobalWebIndex, it has been determined that four out of ten consumers has been reading the news more often; according to Axios, the news of Covid-19 consists of %15 of the web traffic (Pica, 2020) and there is a %72 part of society using the social media as a source of information (Bhagavathula, 2020). Increase in use of social media

like new social platforms, chatbooks, Facebook, WhatsApp, Telegram, Twitter, Instagram, Youtube and Zoom may prove this.

The quarantine period that Covid-19 has brought, cause setbacks in production and consumption and also it introduces the world with 'Pandemic Culture' together with a lot of constructive and destructive changes such as new problem scanning and solving techniques, data analysis, the bold lines' losing their sharpness at home-work, improvisation ways, more attractiveness of virtual reality for consumers, many regulations in public areas (Sheth, 2020).

In this study, the relation between the Covid-19 pandemic and the use of social media has been tested. Regarding this, the third hypothesis of the study:

**H3:** There is a relation between Covid-19 and the use of social media.

### **1.3. DEMOGRAPHICS CHARECTERISTICS EFFECTS ON USE OF SOCIAL MEDIA, USE OF DIGITAL CHANNEL AND FEAR OF CONSUMERS'**

Demographics charecteristics have been one of the top issue during Covid-19 at the center of marketing researches and disrupted the consumer behavior. (Shet, 2020) Demographics as age (Harvey et al., 2001; Kotler & Armstrong, 2018); gender (;Blanchard et al., 2009; Aytekin & Ekinci, 2013); education level (Rasmussen et al. (2006); income (Kotler & Armstrong, 2018) influence customer behavior. Covid-19 covers a wider range of crises than just a health system crisis a since Covid-19 appears it has redefine consumers' habits, priorities, income and needs (Loxton, 2020: 17). During Covid- studies conducted in remote parts of the world (USA, Iraque..) have shown that people's use of digital channels and their fears vary according to age, gender, age and education level. This situation has been found to be more effective through digital channels. It was seen how the pandemic e-commerce, use digital channel and took shape forever. Ecommerce grew 40% in the USA alone, faster than last two decades (Ahmad et al., 2020). Numbers of online shoppers increased and was seperated to their income. 71% of high-income workers, 68% of middle-income workers, and 65% of low-income workers began to anticipate more online shopping in the future (Salesforce, 2020)

Consumers after Covid-19, especially Gen Z and Millennials (Y), emphasized that they do not want to return to store shopping and will continue online shopping through digital channels (Digital Commerce Report; 2020a). on the other hand the number of social media users increased by 3.3% this year, 2020. 12% of social media users between the ages of 16-64 stated that they spent more time on social media. The majority of the increase in the number of social media users has been caused by the age of 35 and over. Digital channel usage and online shopping increased to 36% compared to the pre-pandemic 64% preferred mobile and contactless delivery payment channels. It also used the digital channel of the consumers. (Lavis &Toney, 2020). As the seen consumer behavior was during Covid-19 effected by demographics.

In this study, the relation between the Covid-19 pandemic and the use of social media has been tested. Regarding this, the third hypothesis of the study

**H4a:** The use of digital channel differs according to gender variable

**H4b:** The use of digital channel differs according to income variable

**H4c:** The use of digital channel doesn't differ according to education variable.

**H4d:** The use of digital channel differs according to age

**H5:** The use of social media differs according to demographic variables

**H5a:** The use of social media differs according to gender variable

**H5b:** The use of social media differs according to income variable

**H5c:** The use of social media differs according to education variable

**H5d:** The use of social media differs according to age

**H6:** The fear of Covid-19 differs according to demographic variables

**H6a:** General fear of the virus differs according to gender variable

**H6b:** General fear of the virus differs according to income variable

**H6c:** General fear of the virus differs according to education

**H6d:** General fear of the virus differs according to age

**H6e:** The fear of activity differs according to gender variable

**H6f:** Fear of activity differs according to income variable

**H6g:** Fear of activity differs according to education variable

**H6h:** Fear of activity differs according to age variable

## **2. SUBJECTS AND METHODS**

The aim of this study is to present the influence of the fear of Covid-19 (general fear of the virus and fear of activity) on the use of social media (instagram, twitter etc.) and the use of digital channel (online banking, online payment, virtual card, shopping websites) after Covid-19 that has affected the whole world, was first seen in Turkey on March 10, 2020, and also to test the relation among the related variables.

### **a. Study Design And Population**

In the study, a survey technique of 5-Point Likert Scale in form of open-ended and multiple choice questions has been used as a method of data collection. Turkey's population has been taken into consideration in the study. The population of Turkey (83.154.997) has been accepted as population and address-based population registration information in accordance with the TUIK (2020) has been used.

### **b. Study Tool**

This study has been carried out at the 3rd month of the first Covid-19 case in Turkey in May 2020 by using questionnaire technique on consumers. The questions have been addressed through a link

shared on social networks (Twitter, LinkedIn) as online form by way of Google Form survey portal. The online survey questions that has been used to measure variables, have been formed by inspiring from the websites of two world-wide famous research companies named BCG ( Boston Consultant Group) and McKinsey&Company and also from the reports and shares on social networks (LinkedIn, Twitter). The study consists of five parts: the fear of Covid-19 (general fear of the virus and fear of activity), the use of social media (instagram, twitter etc.), the use of digital channel (online banking, online payment, visual card, online shopping websites), demographic data and open ended questions. The subject of this study is limited with the research subject. The average of data collection is 5- Point Likert Scale in this study. SPSS 26 for Windows and Google Form have been used to measure variations.

### c. Validation

The results showed adequate internal consistency reliability (with cronbach's alpha = 0.81 and the intra-class correlation coefficient was 0.97).

### d. Data Collection And Sampling

The Survey System calculator has been used for the calculation of sample size in order to receive valid results that are able to represent the population of 83.154.997 (TUIK, 2020) enough and also in order to calculate sample size and confidence interval (margin of error). While calculating sample size over the system by using %50 as the worst case percentage, it has been discovered that the confidence interval should be %5, confidence level should be %95, the number of necessary sample should be 384 for the population When the number of participants reached to 384, the online survey portal was closed (The Survey System-Creative Research Systems, 2020). Within this frame, 385 data that is worth analyzing has been obtained from the study and it has been preaccepted that the sample will represent the population.

## 3. DATA ANALYSIS AND STUDY FINDINGS

In this study, SPSS 26 for Windows and Google Form have been used in order to measure and analyze variations. Regarding this, sample characteristics have been tested by frequency tables, hypothesis and factor analysis and later, regression analysis confidence test has been done. According to the findings, the demographic characteristics of the sample group are shown in Table 3.1.

**Tablo 3.1. Demographics**

Age	Frequency	Percent	Cumulative Percent
18-25( Generation Z)	281	73	73
26-40 (Generation Y)	84	21,8	94,8
41-54 (Generation X)	17	4,4	99,2
55+ Baby Boomers	3	,8	100
Total	385	100	
Gender	Frequency	Percent	Cumulative Percent

Male	156	40,5	40,5
Female	229	59,5	100,0
Total	385	100	
Education Level	Frequency	Percent	Cumulative Percent
Graduate of High School or below	74	19,2	19,2
University student	194	50,4	69,6
Associate degree	29	7,5	77,1
Bachelor's degree	63	16,4	93,5
Master degree	18	4,7	98,2
PhD degree	7	1,8	100
Total	385	100	
Family Income	Frequency	Percent	Cumulative Percent
No income at all	49	12,7	12,7161
2500 TL or below	161	41,8	54,5
25001-5000 TL	66	17,1	71,7
5001-7500 TL	59	15,3	87,0
7501-10000 TL	21	5,5	92,5
100001 TL and over+	29	7,5	100
Total	385	100	

It is seen that the participants in the study are mostly those who are in age groups between 18-25 in generation Z (%73), women (%59,5), university student (%50,4) and also those who have 2500TL or below (%41,8) as monthly household income.

Simultaneous factor analysis has been made for all the scales used in the study. As it can be seen in the Table 3.2., factor weights have resulted in mostly high values and variables have been burdened to 3 factors.

**Table. 3.2. Results of Factor Analysis**

	The Use of Digital Channel	The Use of Social Media	Fear
The use of digital channel 1=Yes 2=No			
18. Have you ever done shopping through digital/online (web, application) channels before the Covid-19 pandemic? 1= I've never used, 2=I used for few times, 3=Never changed, 4=I've used, 5=I've used a lot	,569		
19.A. How often did you use digital/online channels (web, applications) in online websites (gittigidiyor etc.) in the last 8 weeks?	,872		
19.B. How often did you use digital/online (web, applications etc.) channels in applications (web applications, applications) in the last 8 weeks?	,855		
19.C. How often did you use digital/online (web, applications etc.) channels in buying and selling in the last 8 weeks? 1=it will decrease a lot 2=it will decrease, 3=it will remain the same, 4= it will increase, 5= it will increase a lot	,889		
21. How will the rate of your use of digital (online) channels change on your shoppings in the forthcoming process?			
E. Vehicle/Automobile	,829		
F. Off licence products and tobacco products	,834		

G.Luxury/Fashion	,882		
H. Games and toys	,794		
I. Games of chance	,864		
K.Travel	,863		
L.Buying a house and renting, loans	,896		
Vitamins, minerals and herbal food supplements	,886		
N.Mass transportation	,847		
O.Public services	,802		
P.Holiday and entertainment	,869		
S.House furniture and decoration	,880		
The use of social media 1=It has increased a lot 2= It has increased, 3=It hasn't changed, 4=It has decreased, 5= It has decreased a lot			
23A. How did your habit of reading news online change during the Covid-19 pandemic process?		,680	
23B. How did your habit of playing online games change? during the Covid-19 pandemic process?		,831	
23C.How did your habit of online film, video payments change during the Covid-19 pandemic process?		,799	
23D. How did your social media usage habit change during the Covid-19 pandemic process?		,794	
Fear 1=Definitely Disagree 2= Disagree, 3=Indecisive, 4= Agree, 5= Definitely Agree			
General fear of the virus			
2. I am afraid of getting infected with Covid-19 most.			,518
4. The world is under a serious danger due to the pandemic of Covid-19.			,733
5. I try to keep myself away from crowded places as much as possible due to the pandemic of Covid-19?			,742
6. The Covid-19 pandemic caused me to change my daily life.			,781
9. I don't have a plan about my future shoppings yet.			,562
10.There is an economic recession ahead for the world.			,560
The Fear of Activity			
K12. Do you hesitate to do the daily activities below?			
A.Travelling abroad			,905
B.Domestic flight			,911
C.Voyage			,924
D.Travel by Bus, Tram car or train			,901
E.Staying at a hotel			,916
F.Taking a taxi			,896
G.Going to a restaurant			,862
H.Visiting shopping stores			,862
M.Going to entertainment places			,810

Total Variance Explained: % 70,533 Varimax Method: Main Components Analysis, Rotation Method : Varimax Rotation (KMO)

This shows that the survey questions that have been used to evaluate variations, involve conceptual integrity and variables have been placed correctly. Only two questions that have been taken



out of the analysis regarding the use of digital channel, the use of social media and fear have not been added to each related.

**Table 3.3. Reliability Correlation, Mean, Standard Deviation and Correlation Analysis**

	Alpha	Mean	S.Dev.	Use of digital channel	Use of social media	Fear
Use of Digital Channel	0,832	2,7092	0,75068	1		
Use of Social Media	0,801	3,713	2,984	,886	1	
Fear	,974	3,978	10,915	,895	,916	1

In Table 3.3, reliability of study variables (alfa values), mean, standart deviation and results of correlation analysis are shown. As it can be seen from the table, Cronbach alfa values are high. According to correlation analysis results, there is a meaningful relation at the level of %1 between the variables of the use of digital channel, the use of social media and fear.

**Tablo 3. 4. Regression Analysis Results for Covid-19**

Independent Variables	Standardized Coefficients Beta( $\beta$ )	Sig. ( $p$ )
Use of Digital Channel	0,284	0,000
Use of Social Media	3,779	0,000
Fear	0,551	0,000

F :0,369 R<sup>2</sup>: 0,970 Adjusted R<sup>2</sup>: 0,969  $\rho$ : 0,000 Std. Error of the Estimate: 0,13210 Durbin-Watson: 1,966

In this study, the regration analysis of a relation between the fear of Covid-19, the use of digital channel and the use of social media has been given. At the end of the analysis, these values have been found: $p > 0,05$ , F value 0,369, adjusted R-squared value 0,969. The model explains %96,9 of the fear of Covid-19, the use of digital channel and the use of social media. As it can be seen in Table 3.4, there is a meaningful relation at the level of %1 between the Fear of Covid-19, the Use of Digital Channel and the Use of Social Media. Therefore, the hypotheses beloware supported by the results of the research: “**H1**: There is a relation between the Covid-19 pandemic and fear.”, “**H1a**: There is a relation between the Covid-19 pandemic and fear of activity”, “**H1b**: There is a relation between the Covid-19 pandemic and general fear of the virus”, “**H2**: There is a relationbetween the fear of Covid-19 and the use of digital channel”, “**H3**: There is a relation between the fear of Covid-19 and the use of social media”. As these results show, the more Covid-19 fear consumers have, the more they use digital channel (online banking, online payment, visual card, virtual purse, online shopping) and social media.

### 3.2. T-TEST

In Table 3.5. the use of digital channels of the female and male consumers in the research mean, standart deviation and results of T-Test analysis are shown.

**Table 3.5. T-Test**

Use of digital channels						
	N	Mean	Std. Dev.	df	t	Sig.
Female	229	2,8361	,62006	383	1,065	,288
Male	156	2,8104	,57334	349,542	1,068	,286
Use of social media						
Female	229	3,9159	,74286	383	-,2,104	0,036
Male	156	4,0721	,74325	332,923	-2,101	
General fear of virus						
Female	229	4,0445	,79431	383	5,739	0,00
Male	156	3,5030	1,02483	276,355	5,487	
Fear of activity						
Female	229	4,0194	1,05170	383	5,137	0,00
Male	156	3,3953	1,33556	279,682	4,914	

The use of digital channels of the female and male consumers in the research (for the shoppings of vehicle/automobile, off licence products and tobacco products, luxury/fashion, games and toys, games of chance, travel, house buying and renting, loans, vitamins, minerals and herbal food supplements, mass transportation, public services, holiday and entertainment, house furniture and decoration) hasn't shown statistical differentiation. While the mean value of this variable is found close (indifferent) to, the means of women, in turn, are 2,8361 and 2,8104. Thoughts on the use of digital channels in the research, are statistically the same for men and women. There is no difference between men and women for the use of digital channel in the study. The both groups perform similarly in using digital channels at their buyings of vehicle/automobile, off licence products and tobacco products, luxury/fashion, games and toys, games of chance, travel, house buying and renting, loans, vitamins, minerals and herbal food supplements, mass transportation, public services, holiday and entertainment, house furniture and decoration.

On the other hand, when it comes to the use of social media (social media usage, reading news online, online film, video payments), there is a statistical difference between the female and male participants in the study. It is seen that men use social media more and also the mean of the men (4,0721) is higher than that of the women (3,9159). The men and women taking place in the study show statistical difference on the general fear of the virus. The mean values of this variable, in turn, are 3,5030 for men and 4,0445 for women. Therefore, general fear of the virus that is felt by the women is more than that of the men. The fear of activity that the men and women have (travelling abroad, domestic flight, voyage, travel by bus, tram car or train, staying at a hotel, taking a taxi, going to a restaurant, visiting shopping stores, online shopping) is statistically different. The women's fear of activity is generally greater than that of the men. It is seen that the mean of the men's fear of activity (3,3953) is less than that of the women (4,0194). Therefore;

**H4a:**The hypothesis “The use of digital channel differs according to gender variable” has been rejected. The hypotheses that have been accepted are: **H5:** The use of social media differs according to demographic variables, **H5a:** The use of social media differs according to gender variable, **H6:** The fear of Covid-19 differs according to demographic variables, **H6a:** General fear of the virus differs according to gender variable, **H6e:** The fear of activity differs according to gender variable.

**Table 3.6. F-Test of Use of Digital Channels**

		df	Mean Sq.	Levene Sig.	F	Sig.
Education Level	Between Groups	5	,948	0,67	2,683	,021
	Within Groups	379	,353			
	Total	385				
Age	Between Groups	3	3,214	,229	2,588	,023
	Within Groups	381	,364			
	Total	384				
Family Income Level	Between Groups	5	1,011	1,973	1,092	,082

As it can be seen in Table 3.6, there is a statistical difference between educational status and age groups of the participants on the use of digital channel. In this study, while the use of digital channel is statistically meaningful for educational status at the level of %1 ( $p:0,000$ ), it differs from age at the level of %5 ( $p:0,023$ ). On the other hand, there is no difference on income status for the use of digital channel. Therefore, **H4b** that is “The use of digital channel differs according to income variable”, has been rejected. In a different saying, there is no difference between the participants on the use of digital channel according to income variable. No difference related with the participants’ levels of income has been found in terms of the use of digital channel. The use of digital channels of the participants doesn’t differ according to their levels of income and while the mean value of this variable has been found close (indifferent) to 3, it doesn’t differ statistically.

**H4c:** The hypothesis that is “The use of digital channel doesn’t differ according to education variable” has been accepted. In other saying, there is no difference between the participants on the use of digital channel according to education variable. The participants exhibit different usage behaviours on the use of digital channel according to educational status. As a result of Tuckey test, there is a meaningful difference between those with master degree and high school graduates or below and those with master degree and university students in favor of high school graduates at the level of %5. It has been found that those with Phd degree has the least mean of digital channel usage in comparison with the other education levels.

**H4d:** The hypothesis that is “The use of digital channel differs according to age” has been accepted. To put in another way, the use of digital channel differs according to age variable and the participants in different age groups exhibit different usage behaviours. Tuckey test has been applied to

understand where this difference is between the participants. As a result of Tuckey test, there is difference between Generation Y (26-41), Generation Z (18-25) and BabyBoomers (55-over it) on digital channel usage in favor of generation Y at the level of %5. According to age variable among the groups, there is a difference in favor of those with younger ages between Generation Z (18-25) and Babyboomers (55-over it).

**Table 3.7. F-Test Analysis for Use of Social Media**

		df	Mean Squ.	Levene Stat.	F	Sig.
Education Level	Between Groups	5	1,969	,152	3,660	,003
	Within Groups	379	,538			
	Total	385				
Age	Between Groups	3	3,367	,477	6,301	,000
	Within Groups	381	,534			
	Total	384				
Family Income Level	Between Groups	5	1,502	0,13	2,747	,021
	Within Groups	379	,547			
	Total	385				

As it can be seen in Table 3.7, there is a statistical difference between educational status, level of income and age groups in terms of the participants' use of social media. Within the frame of this study, while the use of social media is statistically meaningful at the level of %5 ( $p:0,000$ ) regarding education levels and different income groups, it differs %1 ( $p:0,023$ ) for age variable. Therefore:

**H5b:** The hypothesis that is "The use of social media differs according to income variable" has been accepted. In other words, there are differences in social media usage according to distribution of income. As a result of Tukey test, the use of social media is in favor of those with lower income at the level of %5 between those who do not have any income and those who have the level of income between 5001-7500 TL. Those with over 10.000TL as income, have the least mean of social media usage.

**H5c:** The hypothesis that is "The use of social media differs according to education variable" has been accepted. There is difference between participants in social media usage according to level of education. In other words, difference in behaviours regarding social media usage is seen between the participants according to level of education. Tukey test has been applied to understand where this difference is in demography. As a result of Tukey test, there is a meaningful difference in favor of university students at the level of %5. While the university students are ranked first in social media usage, social media and application (instagram, facebook etc.) usage rate falls as the level of education increases towards PhD degree. In other words, the rate of social media usage is falling except university students as education level increases. The highest rate of social media usage belongs to the university students.

**H5d:** The hypothesis that is “The use of social media differs according to age” has been accepted. There is difference between the groups in social media usage according to age variable. As a result of Tuckey test, there is difference between Generation Z (18-25) and Baby Boomers (55 and over) in favor of those with younger ages at the level of %5. Regarding social media usage, Generation Z (18-25) has taken the first rank, Baby Boomers (55 and over) have taken the second rank and Generation Y (26-40) has taken the third rank. There are differences between the participants in different age groups regarding social media usage.

**Table 3.8. F-Test Analysis for General Fear of Virus**

		df	Mean Squ.	Levene Stat.Sig	F	Sig.
Education Level	Between Groups	5	,916	,056	1,054	,032
	Within Groups	379	,540			
	Total	384				
Age	Between Groups	3	2,828	,065	3,311	,020
	Within Groups	381	,854			
	Total	384				
Family Income Level	Between Groups	5	1,502	0,975	2,747	,028
	Within Groups	379	,547			
	Total	384				

As shown in table 3.8, there is statistical difference between education levels, income levels and age groups of the customers in terms of general fear of the virus. This study shows that there is meaningful difference in education level, different age and income groups in terms of general fear of the virus, being %5 for education ( $p:0,032$ ), %5 for age ( $p:0,020$ ) and %1 for income ( $p:0,028$ ). This supports the **H6** that is “The fear of Covid-19 differs according to demographic variables”. In other words, demographic variables cause differentiations on the fear of Covid-19. Therefore;

**H6b:** The hypothesis that is “General fear of the virus differs according to income variable” has been accepted. There is difference between the participative groups regarding general fear of the virus according to level of income. In other words, general fear of the virus differs for those with different levels of income. As a result of Tukey test, there is difference at the level of %5 among those with no income at all, those who have 5001-7500TL income and those who have 10000TL income. The highest rate in general fear of the virus belongs to the participants between 5001-7500TL income group, where the fear peaks. The level of fear of the group with no income at all (mostly students) is lower than that of those who has over 10000 TL income. This result supports and corresponds to the truth that Generation Z is the group, which has the least fear regarding age variable.

**H6c:** The hypothesis that is “General fear of the virus differs according to education variable” has been accepted. General fear of the virus differs according to distribution of income. General fear of the virus of those with different education levels is changeable. As a result of Tukey test, there is a meaningful difference between those with PhD degree and those with master degree,

associate degree and high school graduation/below at the level of % 5 in favor of those with PhD in terms of general fear of the virus. Those who have PhD carry more fear by having a higher mean regarding general fear of the virus. Usually, the more level of education increases, the more general fear of the virus increases as well. However, as an exception, it has been found that associate degree students have the least mean of general fear of the virus in comparison with that of the other education levels.

**H6d:** The hypothesis that is “General fear of the virus differs according to age” has been accepted. There is a meaningful difference among the participants at the level of %5 in terms of general fear of the virus according to age variable. As a result of Tukey test, there is difference between Generation Z (18-25) and Baby Boomers (55 and over) at the level of %5 in favor of the elderly people in terms of general fear of the virus. The Baby Boomers feel more general fear of the virus than that of Generation Z. The mean of general fear of the virus of Baby Boomers is 4,711 and it is higher than the general mean that is 3,8132. Generation X (41-54) feels more afraid than Generation Y (26-40) in terms of general fear of the virus variable.

**Table 3.9. F-Test Analysis for Fear of Activity**

		df	Mean Squ.	Levene Stat. Sig.	F	Sig.
Education Level	Between Groups	5	1,439	,124	3,730	,024
	Within Groups	379	,471			
	Total	385				
Age	Between Groups	3	6,333	,431	4,421	,005
	Within Groups	381	1,433			
Family Income Level	Total	384	4,180	0,01	2,747	,014

As it can be seen in Table 3.9, there is statistical difference among the participants' education status, levels of income and age groups in terms of fear of activity. Within the frame of this study, fear of activity has %5 level of significance for education ( $p$ : ,024), %5 level of significance for age ( $p$ : ,005) and %1 level of significance for income ( $p$ : ,014), and so it shows significant difference. Fear of activity differs according to demographic variables. Therefore,

**H6f:** The hypothesis that is “Fear of activity differs according to income variable” has been accepted. There is difference among the participating groups regarding fear of activity according to income level. As a result of Tukey test, there is difference between those with no income at all, those with 5001-7500TL income and those with 10000TL income regarding fear of activity. More fear of activity has been observed in favor of those with no income at all between those with no income at all and those with 10000TL income. Those with 5001-7500TL income feel more fear of activity between those with 5001-7500 TL income and those with 10000 income. The level of income group, in which fear of activity reaches the peak, is the one with 5001-10000 income. The level of fear of activity of

those with no income at all (mostly students) is higher than that of those with 10000TL income. That is maybe because young people are more active and the virus is spread by interaction and also young people may not afford going to completely steril activity places.

**H6g:** The hypothesis that is “ Fear of activity differs according to education variable” has been accepted. There is difference among the participating groups regarding fear of activity according to education level. As a result of Tuckey test, there is a meaningful difference between those with Phd degree and those with master degree, those with bachelor’s degree and the graduates of high school/below in favor of those with Phd degree at level of %5 in terms of fear of activity. It has been found that the mean of participants who are graduates of high school and below is the lowest of all the other education levels. The participants who have Phd degree have less fear of activity than that of those who have master degree. Those who have master degree have more fear than that of those who have associate degree. Generally, fear of activity differs according to education level.

**H6h:** The hypothesis that is “Fear of activity differs according to age variable’ has been accepted. There is a difference among the participants at the level of %5 according to age variable. Fear of activity differs among the participants depending on the age group. As a result of Tukey test, there is difference between Generation Z (18-25) and Baby Boomers (55 and over) at the level of %5 in favor of the elderly age in terms of fear of activity. Baby Boomers have more fear of activity, which may result from vulnerability in their immune system due to old age and negative results that can be caused by moving. The least level of fear of activity belongs to Generation Z, which proves this assumption. Additionally, Generation Y (26-40) have more fear of activity than Generation X depending on the variable of fear of activity. This may result from more activeness and younger age of Generation Y than Generation X. The greatest mean of fear of activity belongs to Baby Boomers, which is so important that it can’t be taken as a coincidence and that is may be because the younger generations have more confidence in their immune systems while Baby Boomers feel fear more because of their more vulnerable structure due to old age.

## CONCLUSIONS

This study has been carried out among 385 consumers by using online survey technique in May 2020 at the third of month of the first Covid-19 case seen in Turkey ( March 10,2020) on the occasion of Covid-19 that has affected the whole world. The questions have been asked online through a link shared on social networks (Twitter, LinkedIn) over Google Form survey portal. The relation between the fear of Covid-19 that consumers in Turkey have (general fear of the virus, fear of activity), social media usage (instagram, twitter etc.) and digital channel usage (online banking, online payment, virtual card, virtual purse, shopping websites etc.) and also the relation among the variables have been

studied and analyzed according to demographic characteristics (age, gender, income, level of education). The results below have been found by evaluating the data attained with analyses within the frame of the study.

The great majority of this study has been found that when the participants in the study hear Covid-19, the initial things that come to their minds are 'China, biological war, house arrest, quarantine, bat, death, deadly, mask, distance, hygiene, fear, worry, economic warfare'. The intense indication of this fear may be the cause of consumption frenzy and more irrational purchases.

In the study, no difference has been found between the men and the women in their use of digital channel (online banking, online payment, virtual card, virtual purse, shopping websites). Both of the groups perform similarly when they shop. At this point, it may not be necessary to emphasize the factors that differ by gender in the advertisements that encourage the use of digital channels. Using digital channel more than Generation Z (18-25) and Baby Boomers (55 and over), Generation Y (26-41) takes the first rank in digital channel usage. This may be due to the fact that the age range of millennials is the working class and more working remotely.

Fear of activity differs according to demographic variables. Statistically significant differences have been observed in the groups of education level, different age and income regarding general fear of the virus; the more level of education increases, the more general fear of activity develops. While the mean of general fear of the virus of those who have Phd degree is the greatest, the mean of general fear of the virus of those who have associate degree is the lowest. According to the study, it has been observed that Baby Boomers have the greatest fear of the virus, Generation Z has the least fear and Generation Y has the greatest fear of activity. While the elderly group has greater fear of doing activity between the age groups of 55 and over (Baby Boomers) and 18-25 (Generation Z), the age group of 26-40 (Generation Y) has greater fear of doing activity than the age group of 41-54 (Generation X). The age group of 41-54 (Generation X) feels more fear than that of 26-40 age group (Generation Y) in terms of general fear of the virus variable.

The reason why Baby Boomers have greater fear than Generation Z regarding fear of activity and why Generation X feels general fear of virus more than Generation Y regarding general fear of the virus can be old age factor. Also, the reason why Generation Y feels more fear of activity is maybe because working age corresponds with the age range of Generation Y. It is a proof of it regarding income that the level of fear of the group which has no income (students) is lower than that of the group which has 10000TL income. When it comes to gender variable, women's both general fear of the virus and fear of activity ( international travel, domestic flight, voyage, travel by bus, tram or train, staying at a hotel, taking a taxi, going to restaurant, visiting stores) is statistically greater than



men. The reason that fears arise more in women may be due to their maternal nature and protection instinct.

While the university students take the first rank in social media usage on the other hand application usage decrease as we go up towards doctoral degree level of education that means social media usage may be because of distance/online learning, its tools and spending more time at home. Contrary to rise in the use of digital channel as level of education increases, the use of social media decreases as the level of education and income increase. This may be due to the fact that the level of education and income increases, the more complicated business life and the inability to spare time for social media.

Generation Z and Baby Boomers have used the social media most. It has become apparent that Generation Z and the age group of 55 and over (Baby Boomers) have the greatest rate of social media usage and that Generation Y has used social media less. The reason why Generation Z and Baby Boomers are the ones that have used social media most is maybe because Generation Z is prone to technology and also because both generations' age ranges are included in the scope of (Generation Z and Baby Boomers) curfew in Turkey that was in effect for almost three months. Correspondingly, Baby Boomers are in the risk group and they have spent more time at home, which have resulted in their use of social media more. When it comes to the participants in Generation Y, they have used social media less maybe because they predominantly consist of working class. It is seen that men differ from women in use of social media (social media usage, reading news online, online film, video payments) and that they use social media more. This may be due to the large number of men in business life or the fact that women spend more time at home, looking for new activities, recipes, etc. for children.

To sum up, it has been noted that women have higher level of general fear of the virus and lower level of tendency toward doing activity compared to men and that social media usage decreases as levels of income and education increase. In the study, general fear of the virus and fear of activity increase as level of education increases. It has been observed that generally Baby Boomers have the most fear of the virus, Generation Z has the least fear of the virus and Generation Y, working class between the two, also has fear of the virus. Digital channel usage increases in favor of education and it has been used by those who have master degree and Generation Y most (26-40) and Baby Boomers least again. It has become apparent that general fear of the virus and fear of activity increase as age gets on and also that those who are least afraid are Generation Z is first and Generation Y second and those who are most afraid are Baby Boomers. The only exception here is that Generation Y has more fear of activity than Generation X, which is maybe because Generation Y takes place in working class.

## SUGGESTIONS

According to the result of this study, there is a significant relation between the fear of Covid-19 ( general fear of the virus and fear of activity), the use of social media (instagram, twitter etc.) and the use of digital channel (online banking, online payment, virtual card, virtual purse, shopping websites) at the level of %5. The more consumers have the fear of Covid-19, the more their use of digital channel (online banking, online payment, virtual card, virtual purse, shopping websites) and social media increases. Therefore the fear factor can be used by brand managers as a strategy that can be used for products and services that want to increase sales by bringing them to the forefront through advertisements and discourses. These advertisement and discourses strategies factors can be study by next researchers.

Additionally, it is known that there is a noteworthy number of participants saying they haven't used digital channel in the last eight weeks. It can be accepted that as the general mean is 3 (=not changed, will remain same), it indicates digital channel usage will remain out of interest and Turkish consumer profile has a low rate of digital channel usage. At this point, since purchases are mostly made through online channels, advertisements can contribute to the increase of sales with attractive instructional methods for customers that increase digital usage.

The findings of the study can be accepted as a proof that the Covid-19 pandemic process is not very different from processes of other epidemics (regional) and pandemics (global) humankind has experienced before and also that changes and deviations in attitudes and behaviours of consumers, which is caused by epidemics and crisis, will still continue.

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