

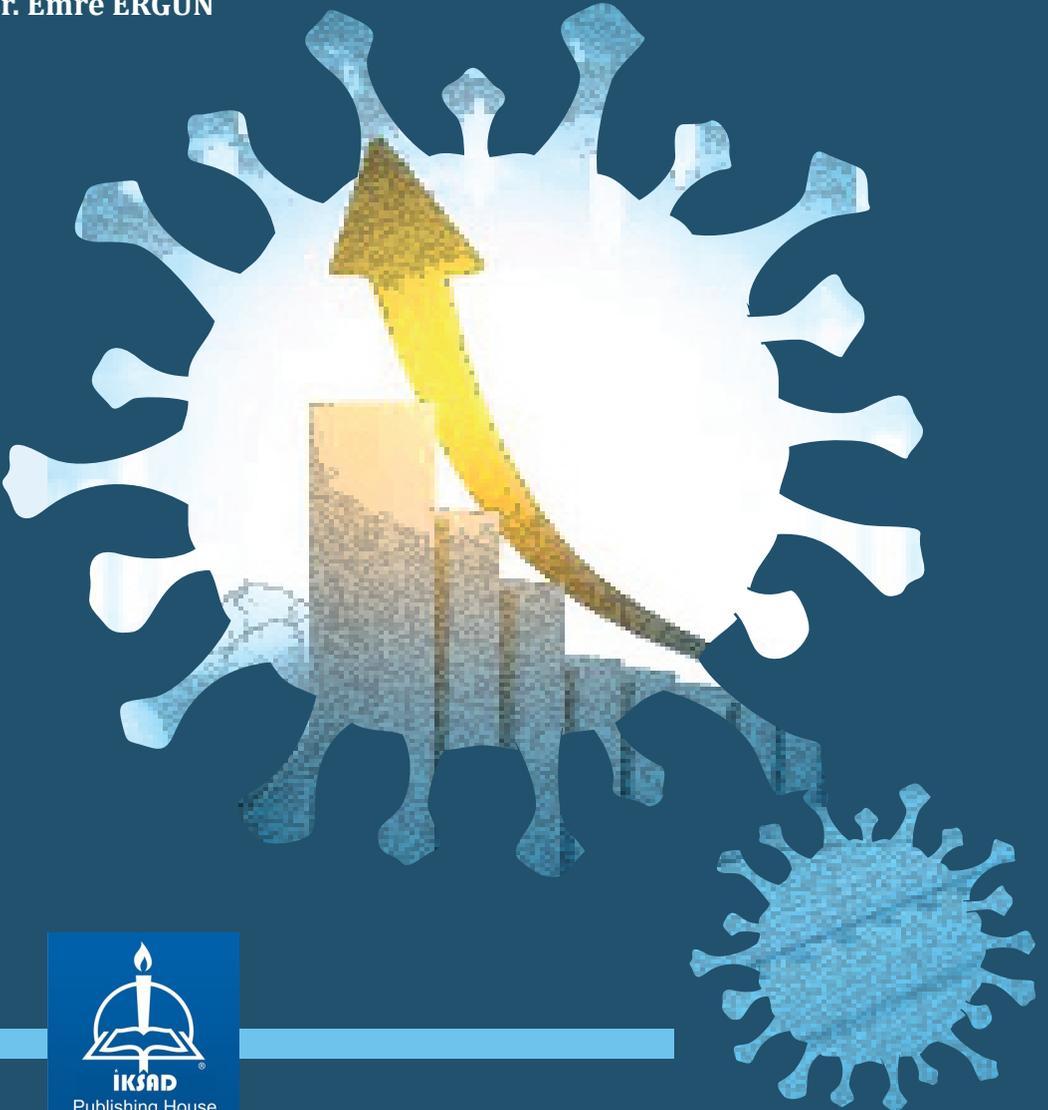
Editor  
Lecturer Özhan Nebi SOYSAL

# ECONOMIC and SOCIAL IMPACTS of COVID 19 PANDEMIC

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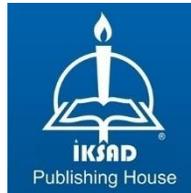
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Asst. Prof. Dr. Emrah Sitki YILMAZ



## **PREFACE**

The COVID-19 pandemic has caused a tragic loss of human life all around the world and presents a big challenge about the public health, habitudes and the business world. The economic and social confusion caused some of devastating situation. On the other hand, there were realized lots of study about the effects of the pandemic process on the economic, human habits and psychology etc.

In this book four academic studies are collected about the effects of COVID-19 pandemic to the human social and economic life. The first one is about economic effects. The economic impact of the pandemic period on the tourism sector is discussed in this article. Also, the possible scenarios are discussed after the pandemic in the sector.

The psychology of people is one of the most effected facts from pandemic. The second article addressed how effected the human psychology by the home designing in the quarantine process. This study is focused especially designing elements (such as colors, layout, furniture) and behaviors of the people during the quarantine.

One more time, the importance of nutrition has become prominent in the pandemic process. As known, nutritional supplements were used in addition to foods that support the immune system. The third article is focused the effects of propolis and honey products for COVID-19 pandemic.

As known communication technologies continue developing day by day and the importance of this technologies, approved by the people from many parts of society especially during pandemic days. In the last study investigate the dynamism of social media which is one of the most popular communication technologies tools and stand out as an important tool for people in the Covid-19 pandemic process, brings to the dimensions of socialization, interaction and communication and the benefits it provides to its users in parallel with technological developments, as well as in daily life.

COVID-19 has caused a dramatic damage all around the world and the academia is also affected form the COVID-19 pandemic, too. I would like to present appreciation to my valuable colleges who searching, producing and contributing in this process.

Editor

Lecturer Özhan Nebi SOYSAL

**CHAPTER 1:**

**THE NOVEL CORONAVIRUS COVID-19 CRISIS ON  
INCOMING TRAVEL AGENCIES: CURRENT SITUATION  
AND POST-PANDEMIC SCENARIOS\***

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\* This study was presented in ATLAS 7th International Social Sciences Congress, Budapest, Hungary in September 23-25, 2020.



## **INTRODUCTION**

According to reports of the World Health Organization, Covid-19 (WHO, 2020a), which caused 455 thousand deaths worldwide, is a virus that completely isolates countries, collapses their health systems, partially paralyzes their international trade and travel (Rafiq et al., 2020, p. 1). Following the detection of 4 thousand deaths, Covid-19, known as novel coronavirus, was declared as a pandemic by the World Health Organization on March 11, 2020 (WHO, 2020b). Governments around the world are trying to strike a balance between preventing unemployment and poverty levels that can be considered dangerous by the virus and maintain their economies. On the other hand, they had to take different measures to prevent collective deaths and the collapse of health systems (Higgins-Desbiolles, 2020, p. 2). Some of these measures are the closure of schools and workplaces, face-to-face meetings, curfews, calls to stay at home, quarantine practices, social distance rules and travel restrictions (Gostin & Wiley, 2020, p. 2138). International, regional and local travel restrictions directly affect the tourism industry and its components (transport, travel, accommodation, catering, entertainment, etc.) that contribute to the national economy. The rapid decline in international air travel due to the crisis, closing the borders of many countries and quarantine practices resulted in a decrease in international and national tourism activities (Gössling et al., 2020, p. 2). Tourism ended largely in March 2020, with international travel bans affecting more than 90% of the world's population and extensive restrictions on community mobility, according to Gössling et

al. (2020). Although highly ambiguous, early predictions of UNWTO for 2020 suggest that international arrivals may fall by 20 to 30% compared to 2019 (UNWTO, 2020).

There are studies in the literature examining impacts of Covid-19 crisis on the tourism industry. Gössling et al. (2020) compared the impacts of Covid-19 with ones of previous disasters and other types of global crises and investigated how pandemic changed society, economy and tourism. After the crisis ended, they made suggestions to the tourism industry, governments and researchers to transform global tourism from traditional tourism into sustainable tourism. Hoque et al. (2020) examined the impacts of pandemic on the Chinese tourism industry. They stated that foreign tourists who want to visit China cancel their holidays due to Covid-19, national and international flights of aircraft companies, and tour operators stopped their activities to prevent the spread of coronavirus. Niewiadomski (Niewiadomski, 2020) made similar suggestions such as Gössling et al. (2020). He stated that Covid-19 has disrupted the travel and tourism industry; on the other hand, this crisis could create an opportunity for tourism to be restructured in the framework of the sustainability principle. He suggested that pandemic could be a tool for eliminating concepts such as environmental pollution, economic imbalance and excess capacity, which emerged with tourism growth. Chang et al. (2020) proposed a 10 items proposal for the tourism industry to recover and make it sustainable post-pandemic.

Nicola et al. (2020) examined the socio-economic impacts of Covid-19 on a sectorial basis. In their study, the impacts of the pandemic on the tourism industry are also examined. They summarized the state supports the European countries and the impacts of coronavirus on the tourism industry in the United States, the Philippines, and Vietnam. Karim et al. (2020) researched the impacts of Covid-19 crisis on the Malaysian tourism industry based on the accommodation and aviation sectors. They suggested that accommodation businesses and aircraft companies encourage their customers to take action. They also thought that their study would contribute to travel agency managers providing the most suitable product and package. Bahar and Celik Ilal (2020) investigated the impacts of Covid-19 on tourism and made suggestions to the public and private sector based on the pre-experienced crises. Altınay Özdemir (2020), addressed the probable scenarios in tourism with the measures taken in the post-pandemic period and pointed out that there will be serious trend changes in the type of accommodation businesses requested and the product variety of travel agencies in the post-pandemic period. Demir et al. (2020) interviewed managers of tourism businesses (travel, boats, food and beverage, aviation) to analyze the impacts of coronavirus on tourism. As a summarize they presented their evaluation before, during and after Covid-19. Ibis (2020) revealed impacts of virus on travel agencies in Turkey by interviewing with travel agencies managers in İstanbul. He has come to result that both travel agents' revenues decreased, and they were adversely affected by coronavirus due to persistence of their fixed expenses. TURSAB (Association of Turkish Travel Agencies)

Advisory Board made some requests from the Ministry of Culture and Tourism in pandemic period. Requests for travel agencies are summarized as postponing taxes such as social security, value-added tax (VAT) until the end of the year, granting long-term and low interest loans, supporting aircraft companies and tour operators, and postponing loan payments without interest to the end of the year (TÜRSAB, 2020).

Travel agencies are intermediary companies that are delivering to tourists the products produced by accommodation businesses. In this case, travel agencies have an important role in the sales and marketing of accommodation businesses (Emir, 2010, p. 1253). Tourists receive information from travel agencies in their accommodation business preferences. Travel agencies have an effect of directing the tourist about accommodation (Dönmez, 2008, p. 83). Travel agencies that organize a package tour also affect tourists' destination choice as well as their accommodation preferences (Alaeddinoğlu & Can, 2007, p. 52). Travel agencies, which enable the tourist to save time and money, offer the tourist an opportunity to benefit from different touristic activities with package tours they organize (İçöz et al., 2007, p. 80). As can be understood from the statements, travel agencies have an important role in the tourism industry.

### **Research Objectives**

The impacts of the Covid-19 crisis on incoming travel agencies are investigated in this study. The main objective is to determine and present the impacts of this serious crisis on incoming travel agencies.

Thus, research objectives are based on investigating these impacts thematically. In this context, impacts of the Covid-19 crisis on incoming travel agencies are explained and interpreted with four main themes: (1) pandemic period, (2) post-pandemic period, (3) marketing strategy, and (4) possible crisis preparedness. Meanwhile, under the pandemic period and post-pandemic period themes, some sub-themes serve as sub-objectives of the research.

The sub-objectives of the research related to impacts of the crisis on travel agencies in the pandemic period (Theme-1) are to examine impacts of the crisis on their reservation cancellation process, on their relationship with other tourism businesses, on meeting condition of operating expenses, and their employment and working conditions.

Sub-objectives of the research on possible impacts of Covid-19 crisis on travel agencies for the post-pandemic period (Theme-2) are to examine managers' threat perceptions about pandemic for the future; to determine which strategies to apply in the face of income losses due to pandemic; to examine managers' intentions regarding product diversification (current markets and tours) for the post-pandemic period; to determine whether they will make changes in tourism businesses (accommodation, food and beverage, boat, transportation) which they have contracted and the priority criteria in preference of tourism businesses; to get potential impacts of increasing of online sales channels on the employment of travel agencies.

The objectives of the research regarding themes of marketing strategies (Theme-3) and possible crisis preparedness (Theme-4) are to examine impacts of the pandemic on marketing strategies of incoming travel agencies and to get managers' opinions on preparedness that travel agencies face a similar crisis in the future.

## **Methodology**

In the research, the qualitative research method (Karagöz, 2017), which tries to explore the reason for individuals' behavior, what meanings they attach to events, and how they have a subjective perspective on events, has been implemented. Researchers should use an appropriate research paradigm in qualitative research to achieve their research objectives and aims. Thus, the study adopted an interpretative research paradigm (Guba & Lincoln, 1994) aimed at revealing real and subjective opinions of the interviewees.

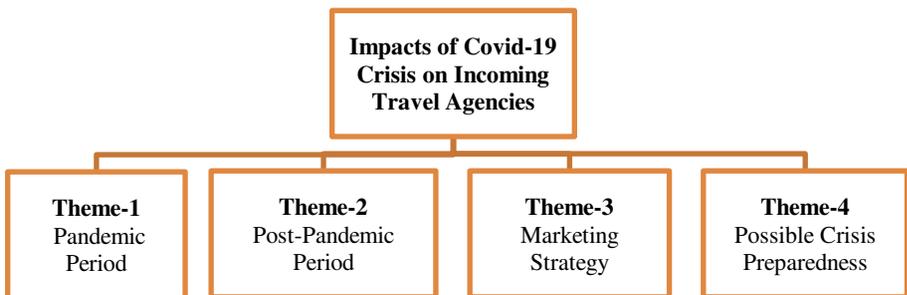
According to the interpretive research paradigm, factors such as environment, conditions and time affect "reality". Since it is not possible to know all the factors affecting relevant "reality" and to control their effects, a complete prediction cannot be made about the future. Therefore, it is tried to interpret the "reality" by examining the factors known to affect the researched subject rather than a prediction with a systematic approach (Karagöz, 2017, p. 570). Another feature of qualitative researches is that they are exploratory research that is "useful in lighting less studied subjects" (Karataş, 2015). Accordingly,

this study is exploratory research according to the way the subject is handled.

## Research Themes

Four main themes were created with the qualitative data obtained in the research. These themes, which indicate impacts of the Covid-19 crisis on incoming travel agencies, are named as *pandemic period*, *post-pandemic period*, *marketing strategy*, and *possible crisis preparedness*.

By the research themes given in Figure 1, research questions to be answered are as following:



**Figure 1. Research Themes**

### Theme-1: Questions for Pandemic Period

*Q<sub>1</sub>: What kind of reservation cancellation process did travel agencies follow in the pandemic process?*

*Q<sub>2</sub>: How did the pandemic affect travel agencies' relationships with tourism businesses?*

*Q3: How did travel agencies meet operating expenses in the pandemic period?*

*Q4: What is the impact of the pandemic on the employment and working conditions of travel agencies?*

## Theme-2: Questions for Post-Pandemic Period

*Q5: Do travel agencies perceive pandemic as a threat for the future?*

*Q6: Which strategies will travel agencies apply in the face of income losses due to the pandemic?*

*Q7: What are travel agencies managers' intentions regarding product diversification (current markets and tours) for the post-pandemic period?*

*Q8: Will travel agencies make changes to the tourism businesses they have contracted in the post-pandemic period and what are their priority criteria?*

*Q8a: Will travel agencies make changes to accommodation businesses they have contracted in the post-pandemic period and what are their priority criteria?*

*Q8b: Will travel agencies make changes to food and beverage businesses they have contracted in the post-pandemic period and what are their priority criteria?*

*Q8c: Will travel agencies make changes to boat businesses they have contracted in the post-pandemic period and what are their priority criteria?*

*Q8d: Will travel agencies make changes to transportation businesses they have contracted in the post-pandemic period and what are their priority criteria?*

*Q9: What are travel agencies managers' opinions regarding the sales method of tours in the post-pandemic period?*

*Q10: Will the increase of online sales channels in the post-pandemic period impact employment of travel agencies?*

### Theme-3: Question for Marketing Strategy

*Q11: How does pandemic impact the marketing strategies of travel agencies?*

### Theme-4: Question for Possible Crisis Preparedness

*Q12: What are travel agencies managers' opinions on preparedness that they face a similar crisis in the future?*

## **Sampling**

The research was carried out on the leading A Group Travel agency with their incoming role in Fethiye, Muğla in June 2020. The screening criterion was used for data collection from travel agencies that bring the highest number of foreign tourists to Fethiye. The non-probability sampling method was preferred in the research with the assumption that

opinions of the incoming travel agencies on the subject will be different from other agencies. In this context, it was aimed to reach the participants who would answer research questions in the most appropriate way according to purposive sampling based on the view of “collecting in-depth information from people, events or situations that have the most appropriate characteristics for the research purposes and questions” (Maxwell, 2012, p. 97).

As Tashakkori and Teddlie (2010) stated in the purposive sampling used to ensure research credibility, researchers first select a sample group from the population and then select a small subset that they think will contribute the most to the research (Baltacı, 2018, p. 258). For this reason, the research was carried out on five incoming travel agencies that brought the highest number of foreign tourists to Fethiye. The study sample is mainly oriented towards the markets of England, Germany, Russia, and Greece. The majority of the leading travel agencies in the destination have been reached with this selection criterion. However, after the third interviewing, it was seen that the responses were repeated. The repetition frequency of information is more important than the sample size in qualitative research on this subject. Therefore, the data collection period is completed when the information obtained in qualitative research reaches a saturation point and the responses begin to repeat (Shenton, 2004). The sample size is considered appropriate for the research since the aforementioned issues are provided.

## **Data Collection**

The data were obtained by using the semi-structured questionnaire in June 2020; through in-depth interviews with incoming travel agency managers in Fethiye. A total of 22 questions were given through a semi-structured questionnaire consisting of three parts. In the first part, 17 questions in total were asked including 5 for impacts of the crisis on travel agencies in the pandemic period, 10 for possible impacts of the crisis on the post-pandemic period, 1 for impacts of the crisis on marketing strategies of travel agencies, 1 about preparations of travel agencies against a possible crisis in the future. In the second part, there were 2 questions about the characteristics of travel agencies and in the third part, 3 questions about demographic characteristics of participants. The questions prepared were discussed and reviewed face to face with an A Group travel agency manager for language and expression validity. Researchers had an appointment with each participant before the interview and paid attention to collect explanatory information about the purpose and scope of the interview for the smooth progress of the interviews.

The data were collected face-to-face in environments where participants could express their opinions, with the researchers' participation. "Standardized open-ended interview", which is one of the interview approaches defined by Patton (1987), was adopted in conducting interviews. According to this approach, the interviewer asks the questions prepared in the same order and in the same way for each interviewee (Patton, 1987, p. 112; Yıldırım & Şimşek, 2013, p. 151).

Interviewer bias and subjectivity are reduced with this approach. It is a very effective approach to reducing subjectivity and bias, especially in studies with more than one interviewer (Yıldırım & Şimşek, 2013, p. 151). Each interview took approximately 40-75 minutes according to this approach. The interviews were conducted with two researchers' participation, one interviewer and one writer. To avoid data loss during these long interviews, a voice recorder was used per participants' permission and at the same time, all interviews were recorded in written form.

### **Data Analysis**

In the analysis of research data, thematic content analysis was used, which enables “information obtained specific to a particular subject to be synthesized and interpreted with a critical perspective by creating a theme” (Calik & Sözbilir, 2014, p. 34). Themes can be created in two ways (Karagöz, 2017, p. 575) either by surveying literature or according to data during an analysis process. Relevant themes were determined in the analysis process of this study. (Karagöz, 2017). According to the writing principle of qualitative research, representation responses of the participants are shown in the quotation by “choosing the expressions that symbolize a subject and express opinions of other participants who often think similarly” (Sood et al., 2017).

## **Validity and Reliability**

Validity and reliability of qualitative research “depend on the degree of overlap of a real-life group, person or institution with the records or interpretations made by the researcher/s” (Karagöz, 2017, p. 604). Records and interpretations are valid to the extent they are real and true, and reliable to the extent that evaluation is the same. Besides, to ensure the validity of statements, all participants’ responses were sent them, and they were asked for their approval of their statements. Lincoln and Guba (1985) mentioned four criteria (Noble & Smith, 2015; Whittemore et al., 2001) in qualitative studies, stating that credibility (Başkale, 2016) should be trust-worthiness (Karagöz, 2017) rather than validity and reliability. These are “credibility”, “transferability”, “dependability” and “confirmability” (Lincoln & Guba, 1985). This study adopted the concept of “credibility”, which Lincoln and Guba (1985) stated instead of reliability, and four strategies proposed by Lincoln and Guba (1985) were followed to ensure validity and reliability.

*Credibility:* The best way to ensure credibility in qualitative research is known as “long-term interaction”. The fact that researchers present in an environment where the data are collected enable them to control their bias (Başkale, 2016). Allowing sufficient time for data collection enables the researchers to have a detailed view of the subject, person, or group. As interview time increases, trust is created and more sincere answers are obtained. Therefore, data obtained through long-term interviews show higher validity. The long interaction between

interviewers and interviewees increases the credibility of data (Yıldırım & Şimşek, 2013). Based on this criterion, obtaining research data with researchers' participation through the in-depth interview takes approximately 40-75 minutes in an environment where interviewees will feel comfortable provides the "credibility" criterion. Also, this criterion is accepted as an indicator of internal validity, as stated in a study of Başkale (2016).

*Transferability:* This criterion, which is a representation of external validity, expresses limited generalization of research findings and results for similar situations. In qualitative research, rather than generalization purpose, the "every researcher perceives and interprets events differently" rule comes to the fore (Karagöz, 2017, p. 605). Therefore, information such as sample selection, characteristics of participants, and the environment (Sharts-Hopko, 2002) should be explained in detail to ensure transferability. Guba and Lincoln (1982) emphasize a need for purposive sampling and detailed description in proving transferability. For this reason, a purposive sample is generally preferred considering the suitability of the subject and research questions in qualitative research. What is important here is not a sample representing the population, but the most suitable sample for research is accessibility (Yıldırım, 2010). The detailed description is that information obtained is clearly stated and raw data is categorized according to themes, and they are transferred to readers without interpreting them (Guba & Lincoln, 1982). Researchers try to ensure the transferability of research by making a "direct quote" for this

(Başkale, 2016). In this case, a purposive sample was used at the study, which examined the impacts of the Covid-19 crisis on incoming travel agencies. Since it is suitable for research subjects and questions as a selection criterion, incoming travel agencies that mainly serve foreign active tourism and are located in Fethiye have been reached. The data are given as raw data in quotes as a direct quote and raw data are categorized by thematic analysis to be understandable.

*Dependability:* Dependability refers to the consistency and reliability of research findings (Moon et al., 2016). The position of reliability in qualitative research is quite different from quantitative research since control of reliability cannot be controlled with a single test as in quantitative research. Generally, it is preferred to use dependability instead of reliability concept in qualitative research. The main reason for this is that with researchers' participation in the data collection and analysis process, dependability must be ensured in all processes of research (creating data collection tools, data collection and data analyzing) (Erlandson et al., 1993; Yıldırım & Şimşek, 2013). Within the scope of this criterion, researchers participated in all stages of the data collection and analysis process and recorded the data to avoid any loss of data.

*Confirmability:* It refers to reveal the truth of findings and conclusion without researchers' bias (Guba, 1981, p. 80). Researchers must present that the finding is linked to conclusions in a way that can be followed for confirmability (Moon et al., 2016). Thus, confirmability is the determination of researchers' objectivity. Evidence needs to be

demonstrated within the framework of principles to ensure this criterion. This evidence consists of sources from which raw data such as voice recordings, interview reports are recorded. Explanation of research findings, themes, process and questions reveals confirmability of the research. The raw data were recorded using voice recordings and interview reports, analyzed in detail during the analysis process and were given unchanged at study. All information about the research process and method has been explained under the “Methodology” heading and confirmability has been proved as expressed.

### **Findings and Interpretations**

The interview method adopted in data collection was held on 3-9 June 2020. Since it is not possible to explain in terms of research ethics, information about travel agencies and managers were kept confidential. Travel agencies’ managers interviewed were given in order according to the date of the interviews as seen in Table 1.

**Table 1.** Characteristics of Managers and Travel Agencies

<b>Manager</b>	<b>Date</b>	<b>Market</b>	<b>Activity Duration</b>	<b>Position</b>	<b>Age</b>	<b>Gender</b>	<b>Time</b>
<b>M1</b>	03.06. 2020	Russia, Ukraine	8 years	Branch Operations Officer	32	Male	40 min
<b>M2</b>	03.06. 2020	Various countries, mainly Greece	3 years	Online Agency Officer	40	Male	75 min
<b>M3</b>	04.06. 2020	Germany, England, Belgium, Netherlands	21 years	Regional Manager	40	Male	50 min 39 sec
<b>M4</b>	04.06. 2020	Germany, England Ukraine, Russia	5 years	Regional Manager	31	Male	46 min 35 sec
<b>M5</b>	09.06. 2020	England	28 years	Regional Manager	34	Male	42 min 40 sec

The current markets of incoming travel agencies that are interviewed are Russia, Ukraine, Greece, Germany, England, Belgium and the Netherlands. The main reason why Fethiye appeals specifically to the English market is that incoming travel agencies in the destination have adopted the British as a common market. It is seen that the mentioned travel agencies have been operating in Fethiye for 3 to 28 years. Besides, managers interviewed work in positions of branch operations

officer, online agency officer and regional manager. It is noteworthy that the sample, consisting of all male participants, is between the ages of 31-40. Findings on themes are discussed under four different headings. Thus, each theme is discussed within itself.

### **Theme-1: Impacts of Crisis on Incoming Travel Agencies in Pandemic Period**

In this section, impacts of the crisis on incoming travel agencies in the pandemic process are discussed in four sub-themes. These are (1) reservation cancellation process of crisis, (2) relationship with tourism businesses, (3) their meeting condition of operating expenses and (4) employment and working conditions.

*“What kind of a procedure did you follow in the refund of canceled reservations?”* was asked. Managers have stated that they generally encounter two procedures in the operation of reservations in the pandemic period: refund and change of reservation. They applied refund procedures in line with tourists’ cancellation requests in the pandemic process. However, this process did not change due to the pandemic, and as M1 stated as *“Normal cancellation process was maintained in pandemic period”*, the normal cancellation refund procedure was followed. Nevertheless, as M5 stated, *“All payments will be refunded until June or July since pandemic is one of the force majeure reasons”*, it is noteworthy that the normal return period is extended. Travel agencies generally made some changes due to pandemic for change of reservation procedure. These changes include

extending time to benefit from reservations and providing flexibility to tourists. All managers except M5 have taken decisions to encourage the change of reservation. Before the pandemic, while tourists' change right was one year, this period was increased to two years by travel agencies.

*In the pandemic process, the reservations were provided to be postponing instead of being canceled. While payments received from digital payment system are kept in the pool for one year, this period can be kept in the pool for two years (M3).*

The response of M3, which operates in Germany, expresses this situation more clearly. Q1 question of research with findings obtained was responded: “Travel agencies have adopted two different processes in reservations in pandemic period: refund and change; they have extended change period for another year to encourage the increase of postponing”.

The answers obtained in response to the question “*How have canceled and postponed reservations affected your relationship with previously agreed tourism businesses (accommodation, transportation and other businesses)?*” asked about impacts of pandemic on relations of travel agencies with tourism businesses, are explained here as the second sub-theme. In this sub-theme, answers are, particularly about accommodation and transportation companies. Regarding their relations with accommodation businesses, the participants stated that they generally (M2, M4, M5) did not experience any difficulties and that accommodation businesses met this period with understanding. M4

expressed this situation as *“In the hotels, payment was not made without check-in customers. There was no problem in accommodation businesses. We were not making prepayments; we were giving cheque”*. However, M5 expressed as *“Normally welcomed. There was no problem. Our contracts will continue as there is no business-centered problem”*, it has been observed that pandemic does not have many impacts on the relationship with tourism businesses. For example; M4 responded as *“Airplane seats were purchased. They were canceled. Cheques were taken back. We did not have a problem for transportation, everyone greeted with understanding”*. Even though it is not relational, there have been transportation businesses that suffered losses due to the promises given to some businesses in line with demand expected from the season before the pandemic. This is better understood from the statement of *“...We said to boats that we will expand your activities and we will give your business. There were businesses that rely on us to grow their business. They were damaged because of us”* of M3. Thus, the Q2 question was responded: *“Because pandemic is a global problem, it has not been very effective in relationship with tourism businesses (accommodation and transportation) of travel agencies”*.

In response to *“How did you pay your operating expenses salary, rent, etc. in pandemic period (when you are not serving)?”* asked managers, it has been learned that travel agencies cover their operating expenses such as salaries and rent in their pandemic period with their opportunities, state support and credit. It can be said with information

obtained that all agency managers participating in the research benefit from the Turkish Employment Agency (İŞKUR)<sup>†</sup>'s Short-Term Employment Allowance. Managers responded as following to support this finding: M1, *“Support was received for employee expenses by making use of the state-supported short-term employment allowance. We can say that state support has been received”*; M2, *“We benefited from the state-supported short-term employment allowance. All our staff benefited from this support”*; M5, *“Short-term employment allowance was received for 3 months. It is calculated on gross salary. We will benefit until the end of June”*. But all travel agencies related to salary differences followed a different process. For example, according to M3's *“... We were giving high pay per meal/shopping cards to our employees every month. We did not interrupt them”* response, employees' salary differences are not paid by the agency, but spending cards are issued. On the other hand, according to Y2's *“Those who benefited from short-term employment allowance received one thousand six hundred Turkish Lira support. The remaining salaries were completed by the agency. In this period, we paid attention not to spoil employees' social life”* response, it is observed that employees' salary differences are paid.

Also, in the pandemic period, travel agencies did not experience any problems regarding office rents. The reason for this is that it is paid at the beginning of the year and it is at affordable prices. As for credit,

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<sup>†</sup> İSKUR, also known as Turkish Employment Agency, was found in 1946 and located in Ankara. İSKUR has been a member of WAPES since 2003 and has been elected as a Managing Board Member during WWC 2012 in Seoul (WAPES, 2020).

only two agencies (M3, M5) obtained credit. However, it is not because of the economic problem brought by this pandemic, but because of its low-interest rates. With interest rates falling, travel agencies obtained credit to take advantage of these low-interest rates. Statements of Y3 as “...As a tour operator, as soon as pandemic period started, we took out a low-interest rate of 1.8 billion Euros from German banks until 2022 ...” and Y5 as “... We only get credit because it was low-interest-rate” support this inference. The Q3 question was responded: “Since travel agencies made annual payments in the pandemic period, they did not have a problem in rental expenses, but they paid their salaries with short-term employment allowance provided by ISKUR”.

Another question that is curious in the research is “*Did income loss you experienced in this pandemic period cause any changes in your employment and working conditions?*”. Travel agencies have adopted two different approaches to employment and working conditions in the pandemic period: partial work/home office and stopping of new hires. During this period, employees worked at partial hours for benefiting from short-term employment allowance, but they did their work as “home office”. All managers except M1 carried out travel agency operations from their homes in the pandemic period. For example, M2 states this situation as “*Short working hours were determined. Our employees worked in their homes before coming to the office. The other three employees were always in the office*” while M4 states as “*They worked as home office. We made 10 days out of 30 looks like working in the business. However, employees did not come to the office*”.

Another finding that is thought to be important in this sub-theme is the stopping of new hires. Pandemic revealed in March, when coastal areas in Turkey correspond to start time of sea, sand and sun tourism. Accordingly, considering Fethiye destination, this is a period of preparation for the season. Travel agencies in Fethiye employ a sufficient number of employees in March and April in terms of preparation for the summer season. Thus, they think that they can provide employment they may need without peak season. But, while this period was followed as mentioned, this scenario was abandoned, and new hires were stopped. M1 supported this inference as “...if there were new hires, they would lay off from the jobs. Thus, new hires have been stopped” whereas M5 expressed as “Yes, new hires were stopped, especially since it was close to starting the season”. Q4 question was responded: “Travel agencies stopped new hires in pandemic period and existing employees carried out their work in form of home-office”.

## **Theme-2: Impacts of Crisis on Incoming Travel Agencies for Post-Pandemic Period**

The managers were asked the question “Do you still perceive pandemic as a threat to the future of your business?” All managers except MY3 stated that they regard pandemic as a threat to the future of their businesses. The travel agency (M3), which does not regard the pandemic as a threat, has a 29% market share in the UK. It is considered that the agency has the power to survive against the negative impacts of pandemic. Q5 question was responded: “Yes, managers perceive pandemics as a threat to their businesses’ future”.

The manager responded to the question of “*How do you intend to compensate for income loss you suffered due to pandemic?*” in different categories. M2 and M3 stated that they reduced advertising and promotion costs to compensate for income losses. They made statements as M3: “*We stopped all advertising and promotional activities to reduce the cost*”; M2: “*We have reduced our advertising and investment costs*”. M1, M2, M3 and M5 stated that they did not consider firing employees during the pandemic. M3: “*As the agency, the last step we will do during the pandemic is foreseen as reduction of employee*” and M1: “*In this period, we do not consider the reduction of an employee as an option.*” Statements show that managers do not consider the reduction of the employee.

The law numbered 7244, adopted on April 16, 2020, is thought to be effective in managers' decisions to fire their employees. The law prohibited the employer from firing employees but approved that they could be sent for unpaid leave (resmigazete.gov.tr, 2020)<sup>‡</sup>.

In terms of unpaid leave, M1 referred to unpaid leave to compensate for income losses with the statement “*If pandemic goes on, there may be no employee fired, but employees can be given unpaid leave*”. Regarding price increase, the three managers’ opinions are different. M2 stated that they do not intend to compensate their income loss with an increase in price with his statement as “*We do not consider any price increase and employee firing*”. M5, with his expression “*If the supplier*

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<sup>‡</sup> Official Newspaper (2020). <https://www.resmigazete.gov.tr/eskiler/2020/04/20200417-2.htm>.

*implements a price increase, we will increase the price depending on the cost*”, stated that they can make price increase decisions based on price increase decisions of the suppliers. It is possible to classify the suppliers of travel agencies as businesses of accommodation, transportation, boat, food and beverage. Since the price increase to be made by these businesses will increase travel agencies’ excursion and transfer costs, it should be considered normal for M5 to increase sales prices. Although M4 makes a close statement to M5 about suppliers, he does not intend to price increase, M4: *“We will ask the suppliers for support. If the hotel room is sold without profit, suppliers at destination may also sell the other services to us cheaper”*. M4 stated that instead of the price increase, suppliers should put their hands under the stone, in other words, they would demand that they work with lower profits without increasing their prices. Rather than kidnapping potential tourists by increasing price, he prefers keeping the market alive with the arrival of a large number of tourists at low prices.

M1, with the statement *“We think there might be a price increase. We will focus on VIP services”*, remarked that there may be a price increase to compensate for income loss and they intend to concentrate on VIP tours. It is thought that the profit obtained from VIP tours will be more than standard tours. According to managers’ statements, it is possible to divide the responses into five categories. These categories shortly are reducing promotional costs, employee firing, unpaid leave, price increase, and supplier support. Accordingly, Q6 question was responded: *“Travel agencies are considering compensating for the*

income loss they suffered due to the pandemic by reducing their promotional costs and employees, applying for unpaid leave, increasing prices in products and getting suppliers' support".

Except for M2, all the managers responded "no" as an answer to "*Do you plan to change your current market due to the pandemic?*". With the statement "*Since pandemic affects the whole world, market change is not considered. We will continue with our current market*", M1 stated that the pandemic also affected other markets and therefore they did not intend to market change. M1, which has been operating in the same market for many years, is thought to be satisfied with the current market. M3, M4 and M5 said similar expressions about not changing the market. As understood from their statements of M3, "*No, we can't change it. The infrastructure is not ready. All businesses are arranged by the British. There is an infrastructure for British in Fethiye. Fethiye is not ready for other markets*" and M5, "*Since the destination and operation are not ready, we have to hire an employee. The procedure of each market is very different. ... Destination needs to be prepared*" they do not consider changing the current market. Managers stated that they did not intend to change the British market because of welcoming the British for a long time in Fethiye. Also, British tour operators, who work with travel agencies, are familiar with the destination and work very well and harmoniously.

M1 responded to the question of "*Do you plan to change your current tours due to the pandemic?*" as "*... for post-pandemic, we will make more VIP tours including low-capacity vehicles and a wide variety of*

*food and beverage services*". M3 and M5 also stated that they would concentrate on individual tours to private tours using expressions similar to M1. M4 stated that they would take a private tour in the Ukrainian market and that they do not think of a private tour in the British market with the statement "*For Ukrainians, yes, we will go on private tours for them. However, our British guests' profiles are not very suitable for private tours*". It is known that the cost of private tours to agencies is also high. It is interpreted as the reason why M4 does not consider organizing a private tour for the British market is that it does not address economically high-income tourists in the British market; because it is not thought that British tourists' income visiting Fethiye can possibly meet private tours' prices.

Accordingly, responses given by the managers to the Q7 question are divided into two as current markets and tours. The majority of agencies stated that they do not intend to change their current markets, but they plan to turn to private tours on their tours. Thus, the Q7 question was responded: "Travel agencies tend to private tours rather than changing their current markets due to pandemic".

M2, M3 and M5 responded "yes" to the question of whether travel agencies are considering changing accommodation businesses they have contracted. M3 and M5 stated that they would prefer hotels to get hygiene criteria determined by the state with the statements, M3: "*We will prefer under the certification recognized according to criteria set by the state*"; M5: "*I will prefer hotels with hygiene and certification*". M2 remarked that they would prefer apartments, suitable families; with

the statement “*We are thinking of turning to apartments and family accommodation businesses rather than hotels*”. Tourists staying in apartments with their kitchens, bathrooms and rooms will be able to spend less time with the outside and spend their holidays. It is thought that apartments and accommodation businesses suitable for families are preferred by both tourists and the agencies to prevent infection.

M4, which has a large accommodation portfolio, stated that they do not think of any change in accommodation with the statement “*No, we work with 98% of accommodation businesses in Fethiye. We pay attention to the portfolio. Tourists can stay at any accommodation businesses they want to stay*” and that they will continue to work with accommodation businesses they contracted with before the pandemic. Most managers regarding the Q8a question stated that they will make changes in accommodation businesses and changes will be accommodation businesses that meet the hygiene certificate standards. Therefore, Q8a was responded: “Travel agencies are considering making changes in accommodation businesses preferences at the reason of hygiene factor”.

**Table 2.** Travel Agencies' Possibility of Changing in Food and Beverage Businesses in Post-Pandemic Period and Priority Criteria

	Yes	No
	Hygiene	Cost
<i>M1</i>		<i>No.</i>
<i>M2</i>	<i>Yes, ... We will not be giving an open product. In food and beverage preference, we pay attention to hygiene rather than cost. In our package tours, breakfast was previously served in restaurants located on the road. However, this does not seem very possible in terms of hygiene post-pandemic. Therefore, breakfast dishes will be stored in the cabinets of buses. Breakfast service will be provided in this way.</i>	<i>... We will use packaged products. While breakfast previously cost two and a half pounds per person, it will cost more than four pounds with this change.</i>
<i>M3</i>	<i>Yes, hygiene is very important. We do not think about cost, we have reviewed it in all services ... We will make our sales by putting our profits at what we get at a high cost...</i>	<i>... If it sells the food worth 15 Lira, which I bought earlier, to me 50 Lira by guaranteeing hygiene and quality, I will reflect it to tourists.</i>
<i>M4</i>	<i>Yes, hygiene is prioritized, although it is more expensive.</i>	
<i>M5</i>	<i>Yes... Hygiene is the first place after this hour...</i>	<i>... Of course, during this crisis, the agency and supplier have to find a common way.</i>

M2, M3, M4 and M5 stated that they would make changes in their food and beverage business preferences due to the pandemic, and hygiene would be in the foreground as seen in Table 2. Managers, who stated

that the costs will increase to ensure hygiene, expressed their opinions in order not to be affected by cost increase. M3 stated that it would reflect the increasing cost to tourists, in other words, it would increase prices to provide hygiene, while M5 would demand that they provide suppliers with more affordable services. Y2 stated that they prioritize hygiene more than cost and stated that they will not use restaurants they have served breakfast in their previous tours and they will provide personalized, packaged breakfast foods on the bus. M1 stated that they will continue with food and beverage businesses before the pandemic. It is seen that almost all of the managers stated that they will make changes in food and beverage businesses and that the priority will be hygiene in the preference criteria. The Q8b questions were responded: *“In the post-pandemic period, travel agencies will make changes to the contracted food and beverage businesses and hygiene will be the priority criterion in this preference”*.

M2, M3, M4 and M5 responded to *“What is your priority criterion in preference boat that you have contracted due to pandemic?”* as hygiene and capacity. M2 and M4 express as *“... Hygiene is at the forefront for us despite the increased cost. ... We will contract if the boat is suitable for hygiene rules to...”* and *“...hygiene and capacity will be important in boat preference in post-pandemic”*. M1 stated capacity as the most important criterion with his expression *“... The most important criterion is capacity. We will pay attention to capacity post-pandemic; we will use two boats if we are using one boat beforehand”*. Also, the Q8c question was responded: *“travel agencies will make changes to*

boat businesses they have contracted with, and hygiene and capacity will be the priority criteria in this change in the post-pandemic period”.

“*Do you plan to change your choice of a vehicle due to pandemic?*” was asked. All managers responded that they would make changes in preference of vehicles due to pandemic, and they would prioritize capacity, cost and hygiene in their preference. M1 stated as “*If capacity is reduced, the price will increase. Tourists may not accept. We will offer an alternative with additional prices to ensure tourist confidence. If tourist agrees to pay the high price, we will provide a low capacity vehicle service*”. M1 also added that they will offer tourists high-priced alternative tours and if tourists accept, they can organize low capacity tours. It is possible to characterize this low capacity high price alternative tour concept as a private tour away. M2 stated that he should sell the tours at high prices to decrease the seating capacity with the statement of “*I would prefer to cut capacity in half if I sold it at a higher price in tours*”. In this respect, he has a similar perspective with M1. M2 also expressed they want to use the vehicle at full capacity in their transfers as “*If there is no problem with the transfer, I would like to use the vehicle at full capacity as an agency*”. Accordingly, Y2 prioritized cost in preference of vehicles. M3 indicated as:

*... They say that there is no capacity limitation for you. You can put 46 people in a 46-person car. Then we can increase the capacity. We are considering getting a certificate such as a hygiene certificate for our drivers. We will ensure that measures*

*such as wearing a mask and providing vehicle disinfection are taken.*

M3 stated that they will use capacity according to legislation and that they will use the full capacity of the vehicle if they comply with the legislation. M3 also prioritizes cost in preference of a vehicle like M2. These agencies will disinfect buses and provide a hygiene certificate for their drivers. M4 pointed out that they will not use their buses full capacity, but they will operate their tours with their passenger capacity (30 people) with his statement “*We were using full capacity 40-people bus on tour. ... We do not put 40 people this season, but not stay under 30. Hygiene and cost are important in this choice*”. Accordingly, Q8d question was responded: “In the post-pandemic period, travel agencies will make changes in vehicles, and capacity, cost, and hygiene will be the priority criteria in this change”.

Managers were asked whether they thought of making changes in the sales method of tours they organized in the post-pandemic period and responses in Table 3 were obtained. M1 stated that tour sales were made face to face from the time of arrival to the destination before the pandemic, but it would be done online before coming to the destination in the post-pandemic period. It aims to take a measure to prevent infection of the virus, and not to let other agents sell their products to them when tourists arrive at the destination. M2 stated that they plan to make all additional sales (car rental, city sightseeing, etc.) online at the destination. In this case, it is seen that M2 has similar thoughts with M1. On the other hand, he perceives face-to-face communication as

inevitable because of some activities (Visa, etc.) they have to do. M3 stated that they will sell tours by kiosks in hotels, and they will decrease the number of hotel guides who sell tours face to face. M4 expressed that they use online sales channels before the pandemic, but they do not get efficiency, and their sales will continue in the same way unless they make a different decision after the pandemic. M5 mentioned similar to M4 and stated that both online and face-to-face sales would continue post-pandemic. Hence, the Q9 question was responded: “Online sales will be at the forefront in tour sales in the post-pandemic period”.

**Table 3.** Managers’ Opinions about Sales Method of Tours in Post-Pandemic Period

	<b>Online Sales</b>	<b>Face-to-face Sales</b>
<i>M1</i>	<i>We are preparing for our online channels. Tourists can now get their extra tours online without coming to Fethiye after making their reservations. We had no such service before the pandemic. ... The sales rate of street travel agencies will decrease. ...Online sales channel is an opportunity not to lose the customer to other agencies.</i>	
<i>M2</i>	<i>There is a tendency for online sales. As an agency, we will change the online sales tactics for extra tours. We also plan to make changes to our marketing policy. We will sell all additional sales on the online channel.</i>	<i>... Since we have visa procedures, we also have to have face to face. We try to carry the intensity to the online channel, but we will also communicate face to face in mandatory situations.</i>
<i>M3</i>	<i>We have already started buying kiosks for digital transformation; we will use them in tour sales in hotels. In this case, we consider reducing the number of hotel guides.</i>	

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*M4 We have been doing this for years. We have our website and program. As soon as guests enter their reference number, they can see tours and transfers at their destination. However, there are habits in customers; they want to see the guide in front of them. Our ads are very strong but somehow, we have not been very successful in online sales. 1% of total sales. We did not talk about this issue because of the pandemic. There is no activity for the pandemic. We continue our sales in two ways as sales in the hotel and abroad. Face to face sales will continue in hotels.*

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*M5*

*Fewer products, more advertising. We will focus on a few products. It will be continued face to face. There may be no change in the number of guides. Maybe I can employ other employees from the agency as a guide, not a hotel guide. There are online sales in tour sales. However, this is not due to the pandemic.*

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Managers were asked whether they are effective in the employment of online sales channels. M3 stated as “There will be a decrease in the number of the employee because of digitalization”. Also, M1 expressed that:

*... There is no reduction in the number of employees, but it can be increased. The reason is that hotel guides of the agency provide info service to guests by visiting them in their hotels. Since the number of people will be taken care of after the*

*pandemic, 10-person information will be downloaded to 5 people. This will increase the number of employees. We will need more employees in customer relations for complaint resolution in online channels.*

M2 explained his opinion on this issue as “*If we switch to the online channel, it is expected to increase rather than decrease in the number of employees. Because if one employee was supposed to deal with the same customers over the phone before, maybe it will be three employees in post-pandemic*”. M4 and M5 pointed out that they would not decrease the number of employees working in the businesses of online sales channels. All managers except M3 mentioned that there would be no change in the number of employees, while M1 and M2 stated that there could be an increase.

Incoming travel agencies gather their customers into a place (hotel, restaurant, cafe, etc.), both by informing (info) about destination and tours with meetings they organize under the name of “welcome cocktail”. It is expected that there will be an increase in the number of employees who will inform and sell tours as they will have to deal with few customers in special groups in the post-pandemic period. Managers also remarked that they would need more employees to satisfy the customer more in online channels, to reduce their complaints, and to meet customer requests and needs in a short time. M3 specified that online channels will cause a decrease in the number of employees. M3 aims to make tour sales in hotels by a kiosk system and to reduce cost by decreasing face-to-face employee. In this respect, the Q10 question

was responded: “The increase of digital sales channels in the post-pandemic period will positively impact travel agencies’ employment”.

### **Theme-3: Impacts of Pandemic on Marketing Strategies of Incoming Travel Agencies**

The answers to the question of “*What strategies do you consider appropriate for your agency during and after the pandemic?*” are examined in this heading, which forms the third theme of the study. Two travel agencies (M1, M2) stated that they were making initiatives related to growth strategy. M1 responded as “*There may be a growth strategy. It is possible after the pandemic. It can grow by turning the crisis into an opportunity. It can incorporate businesses that go bankrupt*” while M2 expressed as “*Growth strategy... We have invested villas to provide our villa services. Also, we accelerated health tourism. We bought two ferries. We increase our product range*”. As mentioned, M1 and M2 stated that they can go for growth with strategies such as taking on tourism businesses that have economic problems due to the pandemic or increasing their products. However, M3 pointed out that it will continue to maintain its position in the market with the following statement:

*It will remain stable. However, we do not think about downsizing. Our business diversity will increase... As we are a global agency, we try to maintain our position. The company has its own 155-160 aircraft. They have cruise investments. If such a large*

*investment and segment width become unmanageable at the time of crisis, it cannot be said that this business will continue.*

M4 said that “*We will go downsizing by closing branches in Fethiye due to failures within the branch ...*” while M5 pointed out “*If it continues this way, the business may go down*”. Shortly, they emphasized that they have possibilities to decrease the number of branches (M4) and to decrease their activities (M5). Accordingly, the Q11 question responded: “Some travel agencies are likely to grow while others are likely to downsize with impacts of the pandemic”.

#### **Theme-4: Anticipated Preparations of Travel Agencies for a Similar Crisis in Future**

There are managers’ opinions with the question as “*What measures would you take as a business in case of a similar global crisis in the future?*” under this heading which is the fourth and last theme of the study. According to findings, all managers stated that they had alternative preparations, but it was noteworthy that these preparations were not in line with a systematic plan. M1 stated that there could be a B plan against possible crisis with the statement “*Because we have experienced this pandemic period, we may have a plan B that is always ready*” but did not provide any information about its content. M2 stated that they would sell from cost price? by reducing the frequency of their activities with the expression of “*... If we face a crisis again, I will focus on three days, not every day of the week. Maybe I will sell from cost price?*” M3, on the other hand, emphasized that they will try to keep

cash in hand with the following opinion and therefore they will make payments in the form of a cheque, no prepayments.

*There is nothing we can do as a result of such a pandemic. We do not raise cash; we try to keep it in our hands. The highest investment is made to air and sea activities. If it is a pandemic again, it may first dispose of the ships. But I do not think that managers will make such a decision. It can only cut off additional expenses. You can make payments by cheque system. We were paying ahead, now we can pay later. -(M3)*

Y4 stated that they can continue their activities with fewer employees since they operate within the budget determined for each branch with the statement “... *Each branch continues its season with the budget given to it by the agent. If the pandemic continues, the branch can remove an employee if it wishes. Or it can go downsizing*” and Y5 stated that they can increase investments other than tourism with the expression “*They have investments. It can turn to other fields than tourism. It can switch to different sectors*”. In this context, the Q12 question was responded: “Travel agencies will try to hold cash to be prepared for the possible crisis in the future, increase the use of cheque in payments, reduce their staff and turn to non-tourism investments”.

## **Discussion and Conclusion**

This study, which reveals the impacts of the Covid-19 crisis on travel agencies, examines these impacts in-depth under four themes (pandemic period, post-pandemic period, marketing strategy, and crisis

preparedness). The findings represent incoming travel agencies managers' perspectives servicing various markets, particularly in England, Russia, Germany, Ukraine, and Greece, operating in Fethiye. The impact of the crisis on travel agencies in the pandemic period was addressed under four sub-themes: reservation cancellation process, relationship with tourism businesses, meeting conditions of expenses, employment, and working conditions.

In the first sub-theme, travel agencies have adopted two processes in the form of reservation change and refund due to the crisis. As Hoque et al. (2020) pointed out; Covid-19 caused the cancellation of global travel programs of tourists and stopping international tourist circulation. Consequently, travel agencies have experienced intensity in reservation cancellation processes. They applied normal returns refund processes, but they gave tourists another year to postpone it, shortly tourists have one more year right to change. Since delaying cancellations with state-guaranteed coupons, as suggested by Ibis (2020), will facilitate the work of travel agencies, even though the state is not guaranteed, the agencies encouraged tourists to change. This is because they think that delays rather than returns are more accurate for their current situation. In the second sub-theme, which deals with the impact of the pandemic on the relationship of travel agencies with tourism businesses, it is noteworthy that the crisis is not effective in these relations due to the globally.

In the third theme, where the findings related to process followed in meeting operating expenses were included, the managers did not experience any problems in rent and office expenses as they were paid in advance, but they benefited from the state-sponsored short-term working allowance in paying staff salaries. In this troubled period, while travel agencies' economic shock is foreseen, it is observed that the agencies experience less difficulty in this period with a short-term working allowance. All travel agencies have benefited from the short-term working allowance. Therefore, they are unable to give their employees unpaid leave and lay off. In the fourth sub-theme, the agencies stopped new hires determined in terms of employment regarding employment and working conditions applied by the travel agencies in the pandemic period. Meanwhile, they applied partial working hours, and this was done as a "home-office".

In the post-pandemic period, impacts of the crisis on travel agencies were analyzed in five sub-themes: agencies' opinion about the future as a threat, compensation of income losses, situation of changing current markets and tours, situation of the suppliers they work with, and impact of online sales channels on the number of employees. It is understood that almost all of the managers see pandemic as a threat to the future of their business. The absence of concrete development regarding the control and treatment of the pandemic (Atay, 2020) justifies the managers to see the pandemic as a threat to their business. They stated that they reduced their advertising and promotion costs, sent their employees to unpaid leave, increased their products' price, and put

pressure on their suppliers not to increase their prices to compensate for income losses suffered by the pandemic. This finding related to price increase supports the scenario of Altınay Özdemir's (2020) "*Tour operators, whose profit margin after the pandemic decreased will likely increase the price of package tours by closing the gap*". Thus, it is understood that managers see the price increase as an option to compensate for losses. It was observed that the agencies did not intend to change the markets they hosted, but they preferred to turn to private tours.

On the other hand, depending on the high costs of private tours, high sales prices are expected. It is understood that the managers will pay more attention to hygiene factors than ever before in their hotel and boat preferences. They stated that they would pay attention to capacity in vehicles such as buses and minibuses. However, it is known that reducing the capacity in terms of both boat and transportation will bring additional costs to the agencies. According to Altınay Özdemir (2020), this is explained by the fact that travel agencies cost the products at high prices, making it necessary to leave some seats due to sanitation and ensuring physical distance. Managers stated that face-to-face sales will continue in the sales method of tours they will organize, but online sales will be more. As stated by Altınay Özdemir (2020), although the managers' decisions are thought to decrease the number of employees and decrease the costs due to online sales, the managers stated that the increase of online sales channels will have a positive effect on the employment of travel agencies. If this is the case, as Atay (2020) said,

travel agencies will tend to employ people who use technology and social media very well.

Managers stated that depending on the pandemic, they had to divide customers into a few specific groups and employ staff for each group. They also stated that they need to employ a large number of employees to manage customer complaints in online channels, to sell tours to customers, and to meet their demands. This finding confirms Altınay Özdemir's (2020) prediction of "traveling with fewer groups" concerning probable scenarios in the post-pandemic period.

The impact of the pandemic on the marketing strategies of travel agencies is examined under the third theme of the study. Travel agencies decided to implement both downsizing and growth strategies because of the pandemic. While travel agencies serving Russian, Ukrainian, and Greek markets have decided to grow, travel agencies serving the UK and German markets have shown a tendency to downsize strategies such as closing branches. However, a Germany-based travel agency, which is among the oldest travel agencies in the destination, stated that it will maintain its current status. This is attributed to the size of the travel agency's investments. It is noteworthy that the mentioned travel agency, which serves large segments in the sector, protects itself without taking a risky decision in the crisis. It is noteworthy that the mentioned travel agency, which serves large segments in the industry, protects itself without taking a risky decision in the crisis. Travel agencies that consider the growth strategy plan to turn the crisis into an opportunity to include businesses that go bankrupt

with more affordable prices, or to make investments in line with the changing demand in the pandemic period. The crisis has been an investment opportunity for these travel agencies. Considering that these travel agencies operate in an incoming role, these strategies become even more important. The growth strategies are important while downsizing is a risk for the tourism development of Fethiye as a destination.

Although travel agencies draw attention to the fact that they do not have a strategic plan for a probable future crisis, they are planning to take some measures. In the event of a similar crisis, the majority of agencies will try to hold cash, prefer to use cheque in payments, reduce the number of employees and invest in different sectors other than tourism. This reveals that travel agencies will gain experience through Covid-19 and continue their activities from a different perspective.

### **Limitations and Future Research**

It is not possible to say that the results obtained are generalizable since the qualitative research method was adopted in the research. The realization of the research according to the exploratory research approach reveals a limitation of the sample to represent the population. It was tried to reach real and true information because it was tried to reach the sample group suitable for the research problem in exploratory research. In this context, rarely obtaining real information about the research problem is a limitation of the study. Since the impacts of the pandemic are discussed within the framework of the interview

questions, impacts other than these questions reveal both a limitation of the research. The research was held in June which is the third month of the pandemic in Turkey. For this reason, the impacts and levels of the pandemic are time limited as they may differ in the future.

Results achieved cannot be generalized because impacts may vary depending on the size, destination, and country of travel agencies. Besides, it is thought that a similar study will be carried out on travel agencies in different destinations in the future, and the results of the research will reveal the similarities and differences, and impacts of the pandemic will be discussed better according to the regional characteristics. On the other hand, the results of the studies conducted on travel agencies classified according to their field of activity, and the results of this study can be compared. Travel agencies that organize types of alternative tourism such as congress, religious, thermal, golf can be the subjects of similar studies to be done in the future. Also, the impacts of the crisis on other components (accommodation, food and beverage, transportation) of the tourism industry can be examined with the opinions of industry managers.

### **Disclosure Statement**

No potential conflict of interest was reported by the authors.

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**CHAPTER 2:**

**IMPACT OF FURNITURE ON THE QUARANTINE  
PSYCHOLOGY**

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## INTRODUCTION

As a designer, it is important to understand how the environment in the interiors of a dwelling affect the behavior and emotions of people living in it. It becomes necessary to design a qualified interaction between the two.

Considering the home quarantine situations existing due to Coronavirus (COVID-19) pandemic which surfaced in December 2019, the situation might continue in the near future as well. Therefore, it becomes important to study the behavior of people and design that influences that behavior. The study of people and their near surroundings has many interacting variables: the colors in the room, furniture, artifacts, their form, texture, light and proper amount of natural ventilation, etc. These aspects can have different values depending on the user's experiences, personality, culture and the activities which are carried out in that physical space.

Recalling the thesis "Human beings are by nature political animals, who naturally want to live together," by Aristotle could be a proper basis for approaching the subject (Miller, 2017). Kupers (2017) as cited in Heid (2020) states that when you deprive humans of social interaction, massive repercussions tend to occur. Not having other people to talk to can lead thoughts and ideas to get very jumbled. Human beings seem to be somewhat hardwired for paranoid thinking, and that spending time in the company of others tends to moderate this emotion. When that kind of interaction is denied or limited, thoughts can wander into

irrational places (Heid, 2020). Although not exactly the same situations, a citizen in shelter-in-place could resemble psychological symptoms as people in solitary confinement. Anxiety, paranoia, and sensory deprivations are among the dangers of solitary confinement (Kupers, 2017).

During a worrisome period of uncertainty, distraction can be helpful in certain situations. Instead of worrying and fretting about COVID-19 or the challenges it presents, actively engaging in activities that distract your brain from anxious thoughts might be helpful (Heid, 2020). Rankin, Walsh and Sweeny (2019) state the benefits of “flow” during uncertain waiting periods. The findings in their study point to challenges in moving people toward flow but suggest that engaging in flow may boost well-being during a period of uncertainty and make waiting a little easier.

The design of the interior space where people have to get quarantined, plays an important role in their life. Flexibility is what characterizes a space, it’s the ability to be variable and adaptable to changes in the lives of users or in relation to the use which these will make over time. This study focuses on how furniture can affect the psychological behavior of a person who is home quarantined.

## **Literature Review**

Looking at the ongoing situation of the coronavirus crisis, it is likely that it can stay with us for some time and therefore the mental health implications cannot be denied. Brooks et al (2020) as cited in Goldhill

(2020) states that quarantine can be linked with post-traumatic stress disorder (PTSD) symptoms, confusion and anger and these effects can be long-lasting. The article also mentions most of these adverse effects come from the imposition of a restriction of liberty; therefore, voluntary quarantine is associated with less distress and fewer long-term complications (Brooks et al, 2020).

McAndrew (1993) describes environmental psychology as the discipline that is concerned with the interactions and relationships between people and their environments. Human behavior, feelings and well-being are affected by the physical environment. Within this context, the prolonged periods of quarantine where people have to stay at one place and nothing changes around them, can let them turn inward. The experience of losing a social and outdoor connect can lead to negative emotions. In such cases, the indoor activities which can help the person to get a change in the interiors like cleaning the house or changing the furniture layout, can help create stimulation (Goldhill, 2020).

The design of interior architecture can affect the human psychological attitude through various aspects. Every person can refer and respond to a particular space in a different way due to the psychological differences. There are different factors that can shape the user's needs as culture, education level, age, gender etc. The interaction between the interior space and the psychological condition of a user can depend on both humanitarian characteristics and the interior approach of design. Since the user has to perform the activities in defined spaces, the interior

spaces have to be designed considering the user's behavioral characteristics (Mahmoud, 2017).

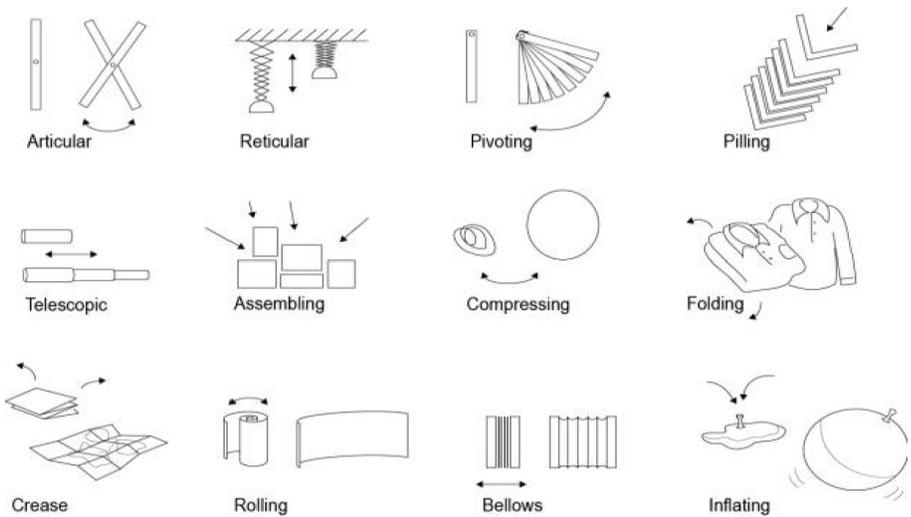
As Kim (1998) cited in Mahmoud (2017), the built environment and architecture of a space should be able to sustain the user's psychological well-being. This factor is of utmost importance because 70% of the user's lifespan is spent in the interiors of a space.

A study tested the pleasure and approach reactions of participants towards curvilinear and rectilinear simulated interior settings. As a result, the curvilinear settings proved to show significantly stronger pleasure ratings. The circumplex of emotions indicated that the curvilinear forms gave rise to more pleasant emotions such as feeling relaxed and peaceful, than the rectilinear settings. The respondents desired to prefer the curvilinear settings more as compared to the rectilinear settings (Dazkir, Read, 2012). This study helps us to understand the influence of furniture forms that relate to the psychological well-being of the user.

As the interiors of a house are important, similarly the interiors of a workspace do affect the psychology of a person. The design of a workspace not only affects how people feel, but also their work performance, their commitment to their employer, and the creation of new knowledge. The user is not just a passive receptacle of the built environment, but the user's experience of the environment is what affects the performance. Some other factors that affect the individual

productivity can be the lighting, noise levels, furniture comfort, temperature and indoor air quality (Vischer, 2008).

The old dwellings are usually smaller than the new residential areas, and to meet the current space standards the usual approach is to change the spatial layout. But these changes can be expensive and not technically feasible. So instead of making any structural changes, it is feasible to make use of furniture that allows multiple or successive uses of the same space, like cooking, dining and living at the same time or one after the other. This option could be cheap and fully reversible and therefore more sustainable (Gomes, Pedro, and Almendra, 2015).



**Fig. 1:** Operational flexibility strategies.



Fig. 2



Fig. 3



Fig. 4

**Fig. 2:** *Ospite*, Vico Magistretti. Campeggi, Italy. Collapsible seat using the *articular* flexibility strategy.

**Fig. 3:** Transformer shelf, Martin Saemer, 2010, Germany. A group of sliding shelves allows the object to gain varied configurations.

**Fig. 4:** 360° container, Konstantin Grcic, Magis.

**Fig. 1, 2, 3 and 4** show some approaches towards flexible use and design of furniture (images derived from Gomes, Pedro, and Almendra, 2015).

A Paris-based agency JCPCDR Architecture, has invented an oak table that raises and lowers from the ceiling using a mechanism that looks like seat belts. The Flying Table is suspended from four seat belt straps which are attached to a docking element fixed onto the ceiling. The straps are wound around a remote-controlled roller shutter motor. The table can be left suspended by the straps to suit the height of the user, or lowered to the floor and stood on its four legs, which fold out from underneath. When the table is brought to the floor, the straps can be detached and retracted back to the ceiling until they are needed again. The design idea of the table suggests making the space more adaptable (Hitti, 2020).



Fig. 5



Fig. 6



Fig. 7

**Fig. 5, 6 and 7** illustrate the idea and design of the Flying Table (Hitti, 2020).

An example for a current furniture design project could be the following: Birmingham-based studio “Intervention Architecture” has installed shapeshifting furniture in an apartment at London, allowing it to transform from a home into a dance studio. The studio has developed a multi-purpose piece of plywood furniture that can take on various configurations. The mobile and folding elements are the seating surfaces, storage and the bed. This idea helps to make the space as flexible as possible. Also, the mechanism used, allows the furniture to be moved and fold easily (Frearson, 2020).



Fig. 8



Fig. 9



Fig. 10



Fig. 11

**Fig. 8, 9, 10 and 11** show the transformation of the space (Frearson, 2020).

## **Methodology**

This paper uses qualitative research methods to discuss the impact of furniture and quarantine on human psychology. It also focuses on finding out design ideas and research articles that emphasize the interior aspects of a home and flexible use of furniture that gets adaptable to the changing times and lives of people, and which can thus reduce the psychological stress.

## **Home Quarantine**

The current situation of pandemic can have a big impact on lives of people and therefore has led and been leading to many changes in their lifestyles. The major change that people have to face during this situation is getting home quarantined. During this phase, people have to manage all their indoor and outdoor activities through their homes. This phase, being continued for a longer period of time, can have an

impact on the future lifestyles of people as well as on the architecture and interiors of their homes.



**Fig. 12:** Stay at home illustrations

Fig. 12 illustrates the different activities that can be carried out from home during the home quarantine phase (compiled from Zlochyn, 2020).

Before the pandemic existed, most of the people did not stay at their homes for a longer period of time. People used to go to their workplace, outdoor gardens, gymnasiums, outdoor sports, supermarkets, malls, etc. The amount of time spent at home was balanced with the outdoor activities. The social interactions, meetings, and other modes of leisure were a break from the routine and helped people to get away from different kinds of psychological stress. A small change in the routine schedule or change in place can help in refreshing the minds and thus can help in maintaining a good physical and psychological health.

Due to the pandemic, the amount of time we spend at home has increased and has become important, so that we can remain physically safe and healthy. This situation has led us to use our homes for almost all our activities such as working, cooking, reading, playing, gardening, exercising, getting entertainment, etc. Staying at homes is helping us stay physically safe and healthy, but is affecting our mental health which is also an important aspect. Hence, this depends on the environments that we stay in and moreover also starts affecting the designs of our homes. A positive environment and good interiors, that are flexible according to the changing situations and can be used by all the people of different age groups staying together, becomes important.

Stressors during quarantine can be described as:

- People fear for their own health and of infecting others.
- People get bored and frustrated during quarantine due to a loss of regular routine and diminished social and physical contact with others.
- Inadequate supply of the daily needs such as food, water, clothes, etc. can lead to frustration and anxiety.
- Having inadequate information about the existing situation and being unclear about the actions to be taken can lead to psychological stress.
- Longer periods of quarantine can lead to post-traumatic stress symptoms and anger (Mehta, 2020).

People need to have social interaction or some face-to-face connection with friends and loved ones. Home quarantine can be a difficult situation for the people who stay alone, rather than the people who stay with their family or friends. Staying alone in a house for a longer period can get in more anxiety and frustration. They can have panic attacks and thus a disturbed mental health. Getting in touch with people through zoom calls and other social media can prove to be helpful in such kinds of situations. Also, following a regular schedule of work, chores, exercise and other activities can help to avoid a lot of mental issues.

Getting engaged in indoor activities like cooking, gardening, playing video games can help in getting distracted from worries. Also, a playful interior space and furniture can contribute in distracting from issues and help in maintaining a better psychological health.

### **Role of the interiors of a house**

Interiors of the house play one of the major roles in dealing with the situation of home quarantine. Interior spaces need to be designed in a way which helps people to carry out all their activities individually and in groups. Homes should have spaces which will allow adequate privacy and spaces for family gatherings and entertainment.

Kopec (2018) defines the psychology of a space as the study of human behavior within the context of that built environment. The interior design of a space can directly affects a person's subconscious, his emotions and perceptions, through that part of the brain that reacts to the geometry of the space that he occupies. Though it is not the only

factor which affects psychology, it can have big implications. It is the responsibility of every designer to shape tangible solutions for users and incorporate those ideas into the structure (Harrouk, 2020).

Architects and designers need to consider some key factors while designing, which include safety, social connectedness, ease of movement, etc. but the major factors also include light, colors, art and ventilation. Some principles of design that comprise balance, symmetry, rhythm and proportion can introduce a sense of harmony. Colors can also have their own impact like warmer the color is, the space looks more compact. They can also evoke feelings of comfort or stimulate communication. Light can have its own impact such as a dim light can suggest a gloomy space, but a bright light can define a bigger animated appearance. Similarly, natural light can stimulate production and recovery.

Along with the other factors, the artifacts placed in the room, whether designed settings or products, can influence human emotions through their usability, appearance and affordability. Trying to bring in emotions through design can provide rich interaction and can also provide satisfaction with the artifacts that we use in our everyday lives. The artifacts can appeal to people through their visual appearances such as with their colour, form, texture and size (Dazkir and Read, 2012).

As the situation has changed, most of us have started using the interior spaces differently than we did before. We have started differentiating the spaces into work and private spaces, individual and group spaces.

In such conditions, the furniture of the house plays a major role. A space can have a different meaning and a different feel by changing its use and by changing the furniture arrangement. Within this context, modularity, multifunctionality, flexibility and convertibility in household furniture could be the keywords at this stage.

A different technique to obtain different atmospheres in the interior spaces could be using certain lighting effects. As our phones have a dark mode, our apartments too can be taken into a dark mode. Even if the furniture is staying the same, the interior atmosphere can be changed by using some of the contemporary techniques. The strategy can be to make use of different lighting for different moods and times of the day, even if the furniture is remaining the same. This can elevate the mood and help reduce the psychological stress (Munro, 2020).

Along with the color, spaciousness and other natural elements, the texture and shape of furniture can also connect with the emotional responses. According to the study of Feng Shui, the shape and texture can represent natural elements such as earth, water, wood, metal and fire. The emotions of a person can connect to these elements in the space. A rug with rich texture can enhance the sense of comfort and happiness. Similarly, the wooden elements can be linked with health and personal growth. It also teaches the ways in which furniture should be arranged so as to not create dead spaces, since it can foster negative energy. Creating a seamless flow through the arrangement can allow the energy to flow seamlessly (Taylor, 2016).

Designing furniture that can adapt to different situations in a house, which can shift its shape, be flexible, or has some technology which can help humans in some kind, proves to be helpful during this phase of home quarantine. As we have to perform different activities from the same space of a house, the furniture can get folding and shape or size modifying characteristics, so that same furniture can be useful for different activities and also for people with different age groups. Some studies have proved that furniture with curved shapes and smooth surfaces prove to be more calming and relaxing to the mind than with sharp edges and fixed polygonal shapes.

Application of some modern technology and using materials that help change the form and make the furniture more flexible can prove to be helpful for relaxing the human minds, as it can be more playful and allow a person to change the arrangement whenever needed and thus create a different feel for the same space. For example, use of magnets into a modular kind of furniture can help change the arrangement of that particular furniture piece and help the user to think in a more creative way, which can also help him to get distracted from the outer world situations. These techniques which can allow the user to get involved in the indoor activities can prove to be helpful to reduce the psychological stress.

One other aspect to help reduce the stress in household environments could be furniture that can allow the user to incorporate the greens into it. Incorporating the greens into the indoors can help the mind to relax and also prove helpful for calming the eyes.



**Fig. 13:** Planter Table by Emily Wettstein



**Fig. 14:** Volcane Coffee Table by Bellila



**Fig. 15:** Sputnik-5 Table by Plan-S23



**Fig. 16:** Comfortable Silence Bench by Jory Brigham

**Fig. 13, 14, 15 and 16** show the examples of incorporation of greens in furniture (all images selected from Contemporist, 2016).

Furniture pieces that can be helpful in maintaining privacy or can be a solution for soundproofing can also be helpful for work from home conditions. A furniture that will allow to create a private working space, within a big space in the house, for a limited period of time can prove helpful in such conditions. That will help to maintain integrity among all the members in the house.

The furniture in the house can be designed in a way which controls the temperature in the house. It can be helpful to give a warm and cool feeling according to the different weather conditions outside.

## **Conclusion**

The furniture and interiors of a space play a major role in a person's life who has to stay at a particular place for a longer time. The furniture and the interiors affect the psychology of a person who is using that particular space. The COVID-19 pandemic which surfaced in December 2019, has led people to stay at their homes for a longer time, thus giving a rise to the new concept of home quarantine. For people to remain physically healthy and safe, all the regular activities including the outdoor ones, like working, exercising, playing, etc. have to be carried out from home. There can be a single person or a group of people of different age groups staying together in a house. Hence, the interior spaces of a house and the furniture has to function in a way that gets adjusted to the use of every person staying in the house. Using one particular space for a longer time, without any social interaction and change of activities can lead to psychological stress for the people staying in the house for a longer time. This paper discussed the impact of furniture and quarantine on human psychology. It also focused on finding out design ideas and research articles that emphasize the interior aspects of a home and flexible use of furniture that gets adaptable to the changing times and lives of people, and which can thus reduce the psychological stress.

The findings indicated that the interiors of a house and furniture play a major role in affecting the psychology of a person when in home quarantine. Staying at home for a longer period of time can get you in anxiety and depression. The furniture of a house can be designed in a way which can help reduce the psychological stress. It can be designed in a more flexible way which can help the user to get more creative and invest his time in indoor activities rather than focusing on the ongoing situation which can lead to mental stress. The interiors can include colors, artifacts and greens which can help to relax the human mind. The furniture in the house can include new technology and materials which will help in using the same space in different ways and thus use the space in a more efficient way.

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## **CHAPTER 3:**

### **EVALUATION OF PROPOLIS AND HONEY PRODUCTS USAGE AMONG 19-65 AGES DURING COVID-19 PANDEMIC**

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## INTRODUCTION

Honey is the natural sweet substance produced by honey bees from the nectar of plants or from secretions of living parts of plants or excretions of plant-sucking insects on the living parts of plants, which the bees collect, transform by combining with specific substances of their own, deposit, dehydrate, store and leave in the honeycomb to ripen and mature <sup>1</sup>. Honey is one of the most widely known bee products in terms of society. The honey product, whose energy value is high due to its simple sugar properties, is used as a food item, in the ingredients of cosmetic products such as soap, cream, and in the raw or processed way as medicine in open wounds and burns <sup>2</sup>. Honey, according to its source; flower or nectar honey (obtained from plant nectar), and secretory honey (obtained from the secretions of living parts of plants or the secretions of plant-absorbing insects living on living parts of plants) are divided into two groups. Pine honey; it is the secretion honey produced by the honeybees collecting and changing the honey flower, which is formed from the carbohydrate-rich sweet sap of *Marchalina hellenica*, which lives on pine trees during the development period. There are different kinds of honey in the honey produced and offered for sale. These honey products are presented in eight different categories according to their production and marketing. These are; blossom honey or nectar honey is the honey that comes from the nectars of plants, honeydew honey is the honey that comes mainly from excretions of plant-sucking insects (*Hemiptera*) on the living parts of plants or secretions of living parts of plants. The other one; extracted honey is

honey only obtained by centrifuging decapped broodless combs; pressed honey is honey obtained by pressing broodless combs with or without the application of moderate heat.

Drained honey is honey obtained by draining decapped broodless combs and comb honey which is honey stored by bees in the cells of freshly built broodless combs and which is sold in sealed whole combs or sections of such combs <sup>2</sup>.

### **1. Honey properties, chemical structure, and labeling**

Honey consists mainly of different sugars, organic compounds, enzymes, and pollen, the majority of which are fructose and glucose. Honey doesn't contain any food components, or food additives, or ingredients.

Honey substances are not only found as organic, and/or inorganic in their natural composition<sup>4</sup>. The properties of honey products vary in taste, smell, and structure according to the source and the type of plant. The appearance of honey can range from water white to dark amber. The substances that give honey color are chlorophyll, carotene, xanthophyll, and betalain pigments.

The consistency of honey depends on the type of flower and plant from which the nectar types. It can be fluid in terms of consistency, full or semi-crystallized, maybe in a viscous structure <sup>5</sup>. Honey flavonoids responsible for antioxidant effects were determined as chrysin, pinocembrin, pinobanksin, quercetin, kaempferol, luteolin, galangin,

apigenin, hesperetin, myricetin and phenolic acids of honey; caffeic acid, coumaric acid, ferulic acid, ellagic acid, chlorogenic acid <sup>6</sup>. In addition, ascorbic acid (vitamin C) and carotenoids, which are among the components of honey, are antioxidants that are important inhibitors of oxidative stress mechanism.

Catalase and peroxidase are also honey enzymes having important bioactive role. The levels of bioactive components in the structure of honey vary depending on the geographical origin of the bee. Besides, as south areas, honey content becomes more different than other areas. Also, there may be a change in the antioxidant properties and losses in the processes such as processing and storage of honey in the processes at the stage of production and presentation of honey to the market <sup>7-8</sup>. There are important considerations in labeling honey. It is called secretion honey or flower honey according to its source on the label. If the source of the honey is pine honey, honey is called 'pine honey'.

## **2. Importance of honey health wise**

Honey, which has been used in the past to treat many diseases today and it has been reported to contain about 200 substances in several studies <sup>9</sup>. In several clinical studies, it was found that honey has important anti-carcinogenic properties with an anti-inflammatory effect, helping to treat digestive system problems, wound and burn treatments, diabetes, and hyperlipidemia <sup>10-16</sup>. Also, in randomized controlled studies, honey and its products were used to treat asthma, neurological diseases, and mental disorders. In studies which the effects

of honey and its products on the immune system were observed, it was noted that the phenolic components in the honey structure had an effect on reducing the response given during inflammation. The phenolic and flavonoid components contained in honey prevent the formation of cyclooxygenase-2 (COX-2) and inducible nitric oxide synthesis (iNOS), which is a precursor to inflammation<sup>17-19</sup>. It has also been observed that some honey species decrease the production of inflammatory cytokine agents such as tumor necrosis factor (TNF- $\alpha$ ), interleukin-1 beta (IL-1 $\beta$ ) and IL-6<sup>20</sup>. In honey tissue cultures, it provides primary and secondary immune response by increasing T and B lymphocytes, antibodies, eosinophils, neutrophils, monocytes. In this way, the importance of honey's role is observed in the human immune system<sup>21</sup>.

### **3. Importance of propolis health wise**

Propolis or bee glue is a resinous mixture that honeybees produce by mixing saliva and beeswax with exudate gathered from tree buds, sap flows, or other botanical sources. Bees use propolis to protect foreign matters, stabilized domestic temperature, contribute to obtaining aseptic area or sterilized area, and generally protect common infection status and close hive apertures<sup>22</sup>. Propolis content varies according to the climate of the region collected. Its main components are polyphenols, phenolic acids, and esters, phenolic aldehydes, ketones, and flavonoids<sup>23</sup>. Other compounds in propolis include essential oils and aromatic acids (5 to 10%), wax (30-40%), resin, balsam, and pollen grains which are a rich source of trace elements such as magnesium,

nickel, cadmium, iron, zinc. Propolis has a very high bioactivity in the cell. It is used for the treatment of most disease symptoms, especially due to its antioxidant, anti-bacterial, anti-fungal, anti-viral, anti-diabetic and anti-inflammatory properties <sup>24</sup>.

#### **4. Importance of healthy & balanced nutrition and nutritional supplements during Covid-19 pandemic period**

In the process of the coronavirus Covid-19 pandemic, which emerged in Wuhan province of China in December 2019, human protection from viruses has been investigated and a solution is sought. World Health authorities argued that priority should be given to certain rules other than vaccination that people should pay attention to individually. It was observed that healthy eating is an important factor in the provision of hand and body hygiene, as well as the protection of the immune system <sup>25</sup>. In this regard, nutritional supplements were used in addition to foods that support the immune system. The immune system must be strong to prevent viral diseases or to survive the course of the disease as mildly as possible. The immune system is influenced by many factors such as genetics, age, gender, nutritional status, smoking habit, physical activity level, alcohol consumption, stress, hormones, infection, vaccine history. Among these factors, the most important determinant that strengthens the immune system is a balanced diet. In cases where some nutrients cannot be used sufficiently in health nutrition, nutritional supplements can be used. These are multivitamins, single vitamin supplements (A, C, and E vitamin groups.), and other (propolis, royal jelly, omega-3, arginine, collagen, etc.) nutritional supplements.

## **5. Background**

This study aimed to examine the consumption of propolis and honey products during and before Covid-19 period between 19-65 years of age. In this purpose, during the Covid-19 pandemic, apart from food supplements aimed at strengthening the immune system, the consumption status of propolis and honey products, their use before and after the epidemic, where they were obtained among the users, what was taken into consideration when purchasing propolis and honey products were determined.

## **6. Methods**

The research constitutes all individuals living in Turkey and having online access regardless of gender in the age range of 19-65. In the study, the cross-sectional-research method was applied, and the participants were reached via an online platform and e-mail. The material of the study consists of data from the survey study conducted with 385 people between the ages of 19-65 who were randomly selected throughout Turkey in 2020. The survey prepared by the researcher using literature and similar studies, consists of a total of 35 questions. The socio-demographic characteristics of the participants in the first eight questions and the use of propolis and honey products before and during Covid-19 were questioned in the remaining questions. The questionnaire, which was used as a data collection tool in this research, was sent to individuals via e-mail and online platforms to provide access to the participants. Volunteer participants filled out the relevant

questionnaire online via the drive.google.com application. In the completed questionnaires, body mass index (BMI) was calculated in kg / m<sup>2</sup> from the kg / height<sup>2</sup> formula by referring to the statements of the participants.

**Statistical analysis:** The data collected for the sub-problems that are sought for answers within the framework of the research problem was first processed into the data coding tables on the computer and using Statistical Package for Social Sciences (SPSS) 22.0 statistical package program. In the statistical evaluation of the data obtained as a result of the research; percentage (%), frequency distribution (f), arithmetic mean, standard deviation chi-square significance test (2), Kruskal Wallis test (cross analysis), one-way ANOVA tests were applied for related samples. Whether the data showed normal distribution was analyzed using the Skewness / Kurtosis, Kolmogorov Smirnov / Levene test method. Results were evaluated at p<0.05 level of significance within the confidence range of 95%.

## **7. Results**

When the demographic structure of the surveyed individuals is examined, 30.6% are the most likely between the ages of 25-34, as shown in Figure 1. 62.1% (n=242 people) of the total respondents were women, with the majority of respondents residing in Antalya with 50% (n=195 people) and Istanbul with 29% (n=113 people) (Figure 2). In terms of educational status, the vast majority of individuals, approximately 35% (n=136 people), appear to have completed

university undergraduate education (Figure 3). The majority of the participants had no chronic disease (35.6%; n=140 people) and the three most common chronic diseases were diabetes (17.66%); cardiovascular diseases (14.6 % n=59); and gastric diseases (10.8% n=43), respectively. When the body mass index (BMI) of the participants is calculated, the individuals classified as overweight in the BMI range of 25-29.9 kg / m<sup>2</sup> are the majority (41%, 160 people; Figure 5).

Among the participants, the age group that uses nutritional supplements the most during the Covid-19 pandemic is the age range of 25-34 with 30% (67 people), followed by 45-54 years old age with 22% (50 people). There was no statistically significant relationship between the age range of the participants and the use of nutritional supplements during the Covid-19 pandemic. It was observed that dietary supplement usage among the individuals could not be associated with increased or decreased age range ( $p=0.104$ ,  $p>0.05$ ). 57.2% (n= 223 people) of participants started to use the nutritional supplements during the Covid-19 pandemic to strengthen the immune system, while 36.6% (n=143 people) started using them to protect their body health.

When the relationship between the reason of use and age range was examined, a statistically positive relationship was observed, and it was concluded that it was mostly used to strengthen the immune system between the ages of 25-34 and 45-54 ( $p = 0.002$ ,  $p < 0.05$ ). Also, like seen in Figure 6, the most preferred nutritional supplement among all participants were, multi-vitamin supplements with 64% (n=249

people). Secondly, the most preferred vitamins were A, C, E, D, and others 23% (n=90 people).

Table 2 examined the comparison of the use of nutritional supplements, propolis, and honey products during and before the Covid-19 pandemic. During the Covid-19 pandemic, 74% (n=287 people) of those who used nutritional supplements were also used before the pandemic. 58.2% (n=227 people) of those who used during the pandemic also used the nutritional supplements before Covid-19. There was a statistically significant relationship between the use of nutritional supplements before and during the pandemic and a decrease was observed in the use of nutritional supplements after the pandemic ( $p=0.007$ ;  $p<0.05$ ). Considering the use of propolis and honey products, it was used at a rate of 53.8% (210 people) before the pandemic, while the rate of those who used it during the pandemic increased to 78.8% (307 people). As a result of the statistical analysis, it was observed that there was a positive significant relationship with the usage of propolis and honey products before and after the pandemic. According to the results, the honey and propolis products consumption increased after the pandemic ( $p=0.002$ ;  $p<0.05$ ). When comparing the honey consumption at breakfast before and after the Covid-19, there was not a significant difference, they consumed approximately same amount; 56.6% (221 people before pandemic, 56.4% (220 people) after pandemic. It was observed that there was no significant change in the consumption of honey at breakfast time ( $p=0.001$ ,  $p<0.05$ ).

When the knowledge levels of the participants about propolis and honey products were questioned (adequate / insufficient / no idea); it has been observed that individuals with a university degree are the group with the highest number among the total participants with 34.6% (135 people). It was observed that 45.6% (n=178 people) of the participants had sufficient knowledge about propolis and honey products (Table 3). The highest frequency of participants' education was high school with 29.2% (n=114 people). Among these participants, 12.6% (n=49 people) responded to propolis and honey products' knowledge levels as adequate. In this comparison, a statistically significant difference was observed between education level and knowledge level of propolis and honey products ( $p < 0.003$ ;  $p < 0.05$ ). It can be said that the higher the education level, the higher the level of knowledge about propolis and honey products.

Utilization of propolis and honey products, regardless of usage or usage status, 85% of individuals (n=331 people) stated that they found propolis and honey products useful, while 15% (n=59 people) stated that they did not find them useful (Figure 7).

In Figure 8, the point of purchase for propolis and honey products was asked to participants, the most purchased points were determined as the least interesting point of purchase was herbalist 0.8% (n=4 people) and 2.7% (n=11 people) said that they purchased propolis and honey products from the farm or village environment.

The most preferred product among those who use propolis and honey products is raw honey (flower, pine, etc.) with a rate of 60% (n=234 people) and the second is propolis with 29% (n=113 people) (Figure 9a). Looking at the form selection among honey products, 64% of the participants (n= 250 people) preferred the raw form (Figure 9b). In their consumption type preferences, the participants stated that they mostly add it to water and secondly, they consume the product directly (Figure 9c). It was observed that 45% (n=176 people) of the participants who used propolis and honey products were encouraged to use it under the leadership of pharmacy/doctor/dietitian. In second place, the importance of the environment (family, friends, etc.) factor is observed with 37% (n=144 people) (Figure 10). When participants who used propolis and honey products were asked about their benefit status, 46% (n=179 people) said it was healing the symptoms of colds, flu, and sore throats. Secondly, 36% (n= 140 people) stated the benefit of increasing body resistance (Figure 11). 48% (187 people) of the participants who buy propolis and honey products stated that it is important to be a reliable brand, while 46% (179 people) think that the brand is very important (Figure 12). When asked about the price, 71% of the consumers (277 people) stated that they found propolis and honey products expensive. It was determined that they pay attention to content with 52% (202 people) and price with 22% (86 people) among the important factors in purchasing.

## 8. Discussion

Particularly, the propolis and honey product preferences of the participants differ in most studies. A survey study conducted in the province of Hatay showed that most of the participants consume bee products and prefer markets and beekeepers, especially when purchasing strained honey<sup>26</sup>. In 2015 in a study conducted with the participation of 2178 university students in Kayseri, it was determined that the most preferred honey products among honey products were flower honey with 72.2% and extracted honey with 56.6%<sup>27</sup>. In a study conducted with university students in Izmir in 2014, 38.5% of consumers stated that they purchased honey and products from super or hypermarkets<sup>26</sup>. In this study, it was seen that the participants mostly preferred raw honey and supermarkets and cosmetics stores for purchasing<sup>28</sup>. In the survey study conducted in Tokat-Central district, it was determined that the majority of consumers preferred filtered honey (86.7%), consume honey with honeycomb and pollen respectively, and in the study, it was noted that consumers pay attention to quality, then price and packaging when purchasing honey and products<sup>29</sup>. In a study conducted with university students, it is understood that the appearance and price of honey are not important when purchasing honey while paying attention to its consistency, brand, and production dates<sup>27-28</sup>. In the study conducted in İzmir, the most important factor when purchasing honey and its products is the place where honey is purchased (38.4%), this is the region where honey is produced (30.6%), label (11.6%), price (10%), and color (8.3%) factors

<sup>29</sup>. In this study, it was determined that the place where it was sold and the reliable brand are among the important criteria in purchasing. In another study, awareness of bee products and frequency of use was determined as honey (99.4%), pollen (61.6%), royal jelly (52.8%), wax (46.4%), bee venom (16.3%) and propolis (8.9%)<sup>30</sup>. In this study, awareness percentages were determined as raw honey (60.2%), propolis (28.6%), royal jelly (1.4%), and bee bread (1.2%), respectively, according to the data obtained from consumption. In a study conducted in 2008, it was observed that there is a relationship between sufficient knowledge of propolis and bee products and educational levels ( $p < 0.016$ )<sup>31</sup>. In this study, a positive relationship was found between educational status and having sufficient knowledge ( $p < 0.003$ ). A study conducted by the same researchers found a positive relationship between the habit of buying branded honey and the level of education<sup>32</sup>. This study was also statistically significant between the level of education and the importance of the brand, a positive relationship between high levels of education and knowledge about propolis and honey products.

## **Conclusion**

During the Covid-19 pandemic, it was observed that interest in propolis and honey products increased to strengthen the immune system and maintain the integrity of the body's health. When all the results obtained in the study were evaluated, it was observed that propolis and honey products usage increased during the Covid-19 pandemic. In the data obtained, it was concluded that the multivitamin supplements was the

most used supplements before and during the Covid-19 process, and; when looking at the state of use, more than half of the participants found it useful. It has been found that the level of knowledge about propolis and honey products has increased compared to other studies. 85% of participants stated that they found propolis and honey products useful, while those who used them saw the most benefit in cold, flu, and similar symptoms. During Covid-19, the need for nutritional supplements, propolis, and honey products increased in addition to a healthy diet to maintain and support body resistance. In this study, the main reasons for the consumption of honey products include the strengthening the immune system and maintaining body health. As the positive results of propolis and honey products on the immune system are observed, it is expected that such products will be diversified, and their use will increase. Creating marketing strategies that attach importance to the quality and brand of propolis and honey products will also be an effective tool in terms of increasing consumer interest and reliability of their products. It is believed that more extensive research studies on the usage of propolis and honey products will provide more detailed data on information related with these products.

### **Ethical approval**

The study protocol was reviewed and approved by the ethics committee of the Okan University of Health and Sciences (Ethics code: 56665618-204.01.07). Informed consent was obtained from all study participants before data collection.

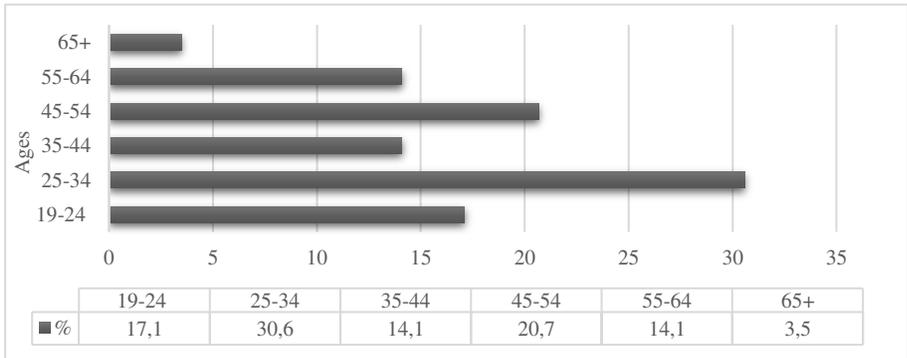
## Conflict of interests

The authors declare that there is no conflict of interest.

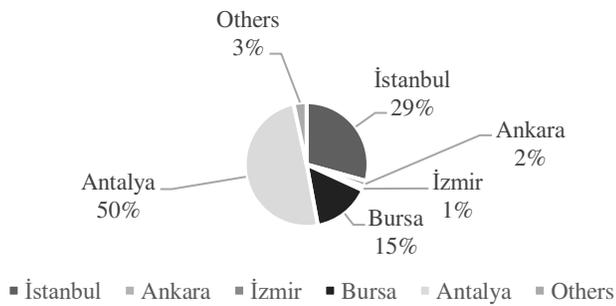
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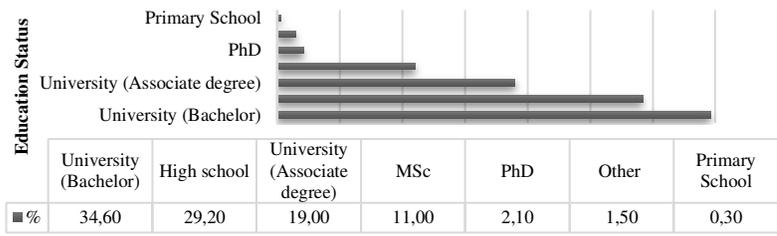
## List of Figures and Tables



**Fig. 1:** Age (years) groups

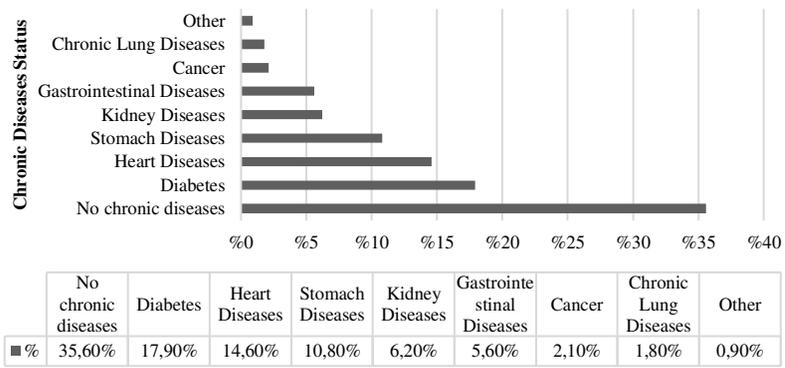


**Fig. 2:** Places (City, Turkey)



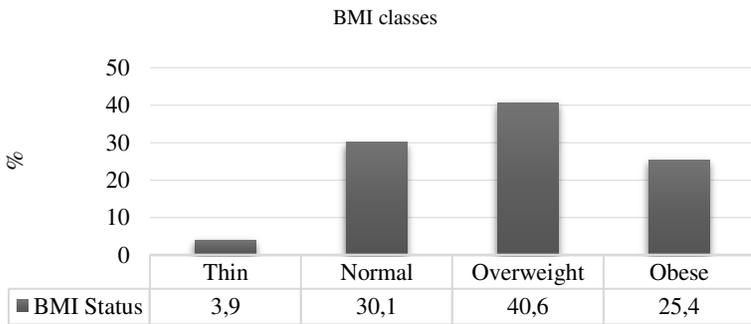
%

**Fig. 3: Education level**



%

**Fig. 4: Chronic diseases status**

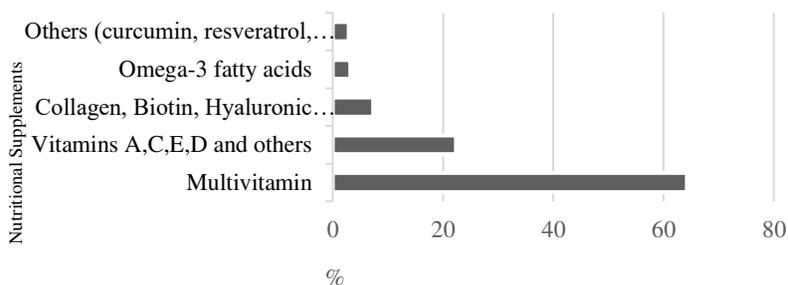


**Fig. 5: Classification of BMI status**

**Table 1:** Correlation of taking nutritional supplements and intended use between ages at before and during Covid-19

Ages		19-24 n (%)	25-34 n (%)	35-44 n (%)	45-54 n (%)	55-64 n (%)	65 n (%)	Total n (%)
Taking nutritional supplements before Covid-19 pandemic	Yes	31 (7.9)	67 (17.1)	33 (8.5)	50 (12.8)	45 (11.5)	1 (0.25)	225 (58.2)
	No	36 (9.2)	52 (13.4)	25 (6.4)	30 (7.7)	19 (4.9)	1 (0.25)	163 (41.8)
	Total (n)(%)	67 (17.1)	119 (30.5)	58 (14.9)	80 (20.5)	64 (16.4)	2 (0.5)	390 (100)
p value*	0.104*							
Intended usage of nutritional supplements during Covid-19 pandemic	Strengthening of Immune system	30 (7.9)	67 (17.2)	32 (8.2)	48 (12.05)	45 (11.5)	1 (0.25)	223 (57.2)
	Protect to body integrity	28 (7.1)	45 (11.6)	19 (4.9)	30 (7.9)	20 (5.3)	1 (0.25)	143 (36.6)
	Psychological factors	3 (0.7)	1 (0.25)	1 (0.25)	5 (1.2)	5 (1.2)	1 (0.25)	16 (4.4)
	Others	1 (0.2)	4 (0.95)	2 (0.5)	1 (0.25)	-	-	8 (1.8)
	Total (n) (%)	62 (16)	117 (30)	54 (14)	84 (21.4)	70 (18)	3 (0.6)	390 (100)
p value*	0.002*							

\* $p < 0.05$



**Fig. 6:** Participants nutritional supplements preferences

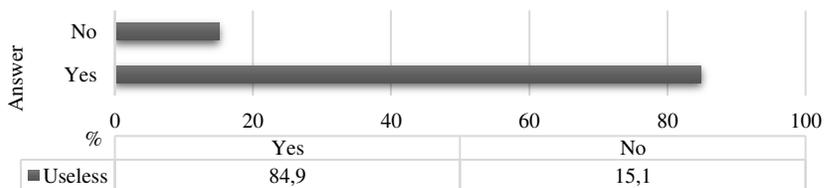
**Table 2:** Comparison of using nutritional supplements, honey products and propolis and participants who are consuming honey in breakfast before and during Covid-19 with Regression Analysis (n=390 people)

	Before Covid-19 pandemic usage (n) (%)	During Covid-19 pandemic usage (n) (%)	$\beta$	Standard Error	t value	p-value
<b>Nutritional Supplements</b>						
Yes	287 (74)	227 (58.2)	0.120	0.367	1.899	0.007*
No	103 (26)	163 (41.8)				
<b>Propolis and Honey Products</b>						
Yes	210 (53.8)	307 (78.8)	-0.774	0.359	1.614	0.002*
No	180 (46.2)	83 (21.2)				
<b>Consuming honey at breakfast</b>						
Yes	221 (56.6)	220 (56.4)	-1.707	0.061	2.299	0.001*
No	169 (43.4)	170 (43.6)				
R <sup>2</sup> : 0.974 Revised R <sup>2</sup> :0,344 F value: 11.888 p value: 0.000 Durbin Watson: 1.961 *p<0.05						

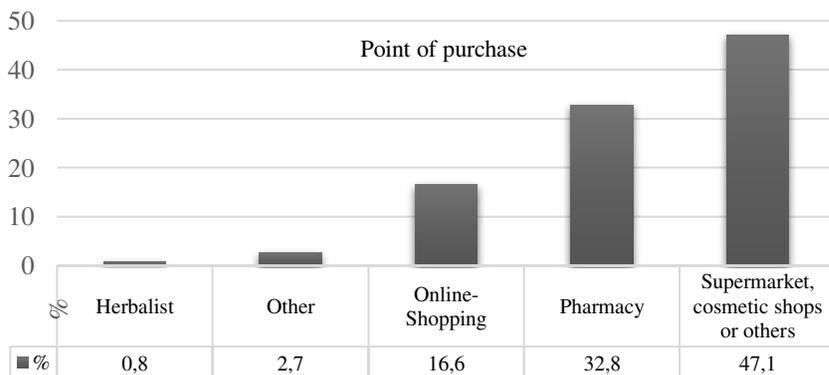
**Table 3:** Correlation between educational level and propolis and honey products

Education Status	Knowledge Level			Total (n) (%)	p value
	Sufficient (n)(%)	Insufficient (n)(%)	No idea (n) (%)		
Primary school	-	-	1 (0.3)	1 (0.3)	0.003*
Secondary school	5 (1.2)	2 (0.5)	2 (0.5)	9 (2.3)	
High school	49 (12.6)	36 (9.3)	29 (4.8)	114 (29.2)	
University-associate degree	32 (8.2)	24 (6.2)	18 (4.6)	74 (19)	
University-Bachelor degree	57 (14.6)	38 (6.8)	40 (10.3)	135 (34.6)	
Master	31 (8)	7 (1.8)	5 (1.3)	43 (11)	
Ph. D.	4 (1.1)	3 (0.8)	1 (0.3)	8 (2)	
Other	-	2 (0.6)	4 (4)	6 (1.7)	
Total (%)	178 (45.6)	112 (29)	100 (25.4)	390	

\* $p < 0.05$

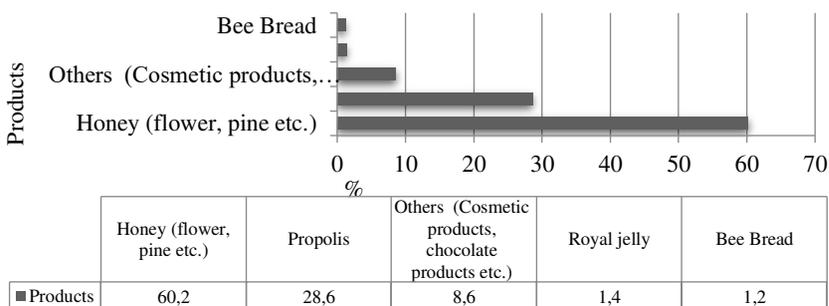


**Fig. 7:** Usefulness of propolis of honey products

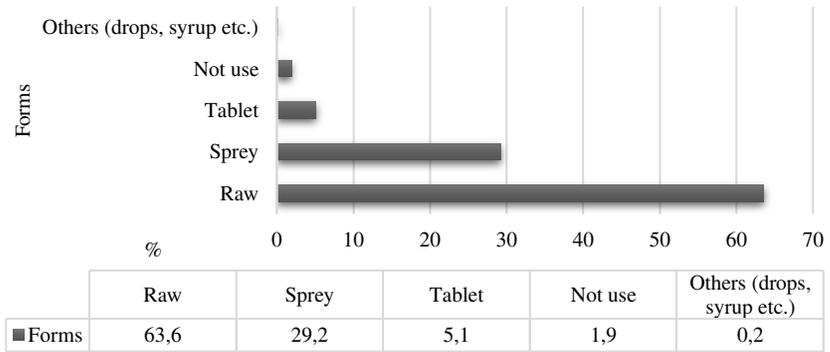


**Fig. 8:** Point of purchase for propolis and honey products

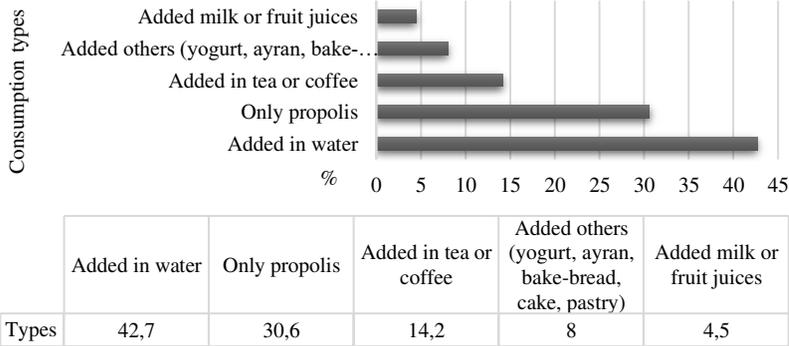
### a-Preferences of honey products during shopping



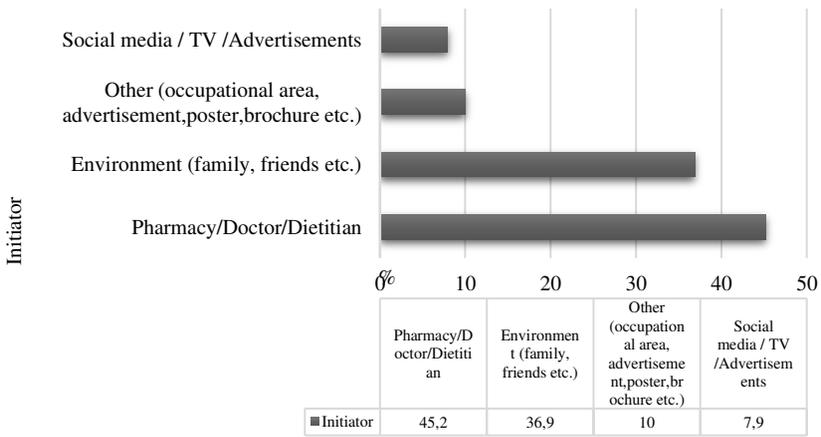
### b-Preferences of consumption form



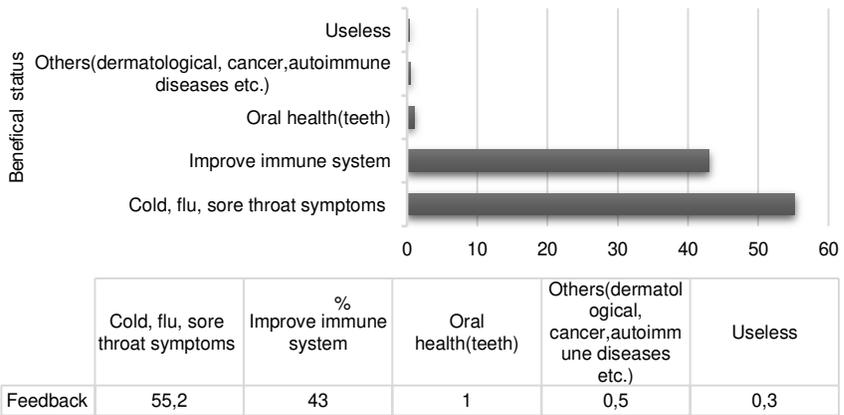
### c-Preferences of consumption methods



**Fig. 9:** Preferences of propolis and honey product, form and consumption types

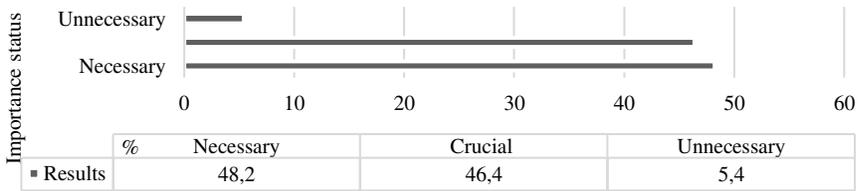


**Fig. 10:** Distribution of people or media encouraging the use of propolis and honey products

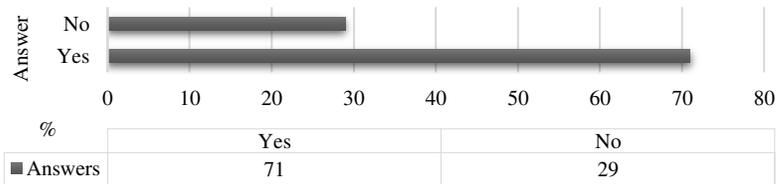


**Fig. 11:** Benefits from the use of propolis and honey products

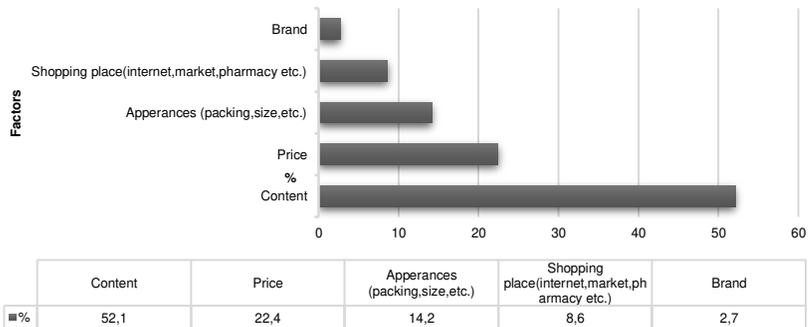
### a-Importance of realible brand



### b-Evaluation of price (expensive or not)



### c-Important factors in purchasing



**Fig. 12:** Evaluation of factors during purchasing of propolis and honey products

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**CHAPTER 4:**  
**SOCIAL MEDIA COVERAGE OF THE COVID-19**  
**PANDEMIC**

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## INTRODUCTION

The Covid-19 (novel coronavirus) infectious disease, which originated in December 2019 in Wuhan, Hubei province, China and spread over a wide area in a short period of time, has affected the whole world (Carlos, et al., 2020; Husnayain, et al., 2020). The fact that the disease is transmitted through breathing, leading to various infections among people, causing rapid deaths, spreading easily and constantly, and the lack of any treatment method has led to the initiation of the pandemic (global epidemic) process by the World Health Organization (WHO) (Middleton, et al., 2020; Wang, et al., 2020). Currently, with around 52 million people infected, 1 million three hundred thousand fatalities, the number of cases and deaths continue unabated in today's conditions, this pandemic process experienced throughout the world has negatively affected existing firms and the world population by laying the foundation for the emergence of various economic and social problems on a global scale (Paital, et al., 2020; Tisdell, 2020; Worldometers, 2020). From an economic point of view, all the wheels from production to consumption have come to a standstill and there is a large decrease in the rate of total demand, the formation of an environment of instability and vulnerability in economic development, partial or complete closure of more than 80% of the global workplaces in line with the measures taken, and with the impact of the shock in the global economy caused by the virus, major problems such as negative growth adaptation, worker inferences, falling competitiveness, and trends in breaking and disrupting supply chains have emerged (Chen, et al., 2020;

Samadi, et al., 2020; Popkova, et al., 2021). From a social perspective; people have had to cope with many problems, with 30% of the world's population exposed to different country-wide quarantine practices, the health system being inadequate in most countries, the restriction of the freedom of travel of individuals, not taking advantage of holiday opportunities, staying away from family and friends, closure of parks, shopping centres and schools, layoffs, inability to receive salaries and low purchasing power, and trying to adapt to the new normal order. (Ashraf, 2020; Gopalan and Misra, 2020; Kithiia, et al., 2020).

During the pandemic process, where face-to-face communication is reduced, social trust is weakened, and uncertainty and anxiety have reached peak levels, the concept of social media, which has a very important place under normal life conditions, has played a critical role in this process in terms of focusing on what people think and feel at the individual and collective level (Depoux, et al., 2020; Srivastava, et al., 2020). Social media platforms, with users accounting to half of the world's population at 3.5 billion users on a global scale (Davis, et al., 2020), it mediated people to connect and maintain relationships with each other during the Covid-19 pandemic process, while at the same time allowing the spread of true, false, unconfirmed or sensationalist information and the tracking of shared content by others (Abd-Alrazaq, et al., 2020; Apuke and Omar, 2020; Duraisamy, et al., 2020). In this process, where the concept of social distancing has become the new norm, the use of social media sites, which replace traditional communication and technologically called new digital media, or the

increase in the existing usage rates have almost become a psychological requirement for people (Brooks, et al., 2020; Chan, et al., 2020). Social media environments in which people over-participate in order to satisfy their interaction needs and reduce the effects of the crisis caused by them while trying to deal with the pandemic process socially or psychologically, have brought their pre-epidemic popularity to universal dimensions in this process (Cinelli, et al., 2020; Rovetta and Bhagavathula, 2020; Zhao and Xu, 2020). In addition to socializing and communicating on social media sites, it is also being used in academic fields such as for holding online conferences, trainings, lectures and seminars, and has been one of the most important actors of this process by being used for the purposes of providing safe and uninterrupted business in terms of holding meetings and working from home (González-Padilla and Tortolero-Blanco, 2020; Singh, et al., 2020).

Based on this information, the aim of the study is; to investigate in detail the dynamism social media, which stand out as an important tool for people in the Covid-19 pandemic process, brings to the dimensions of socialization, interaction and communication and the benefits it provides to its users in parallel with technological developments, as well as in daily life. In addition, this study is important in terms of determining how the pandemic process is reflected on social media from different angles, for what purpose it is used and in what direction it affects people, reviewing the necessary relationships and supporting it with literature.

## **Social Media Coverage of the COVID-19 Pandemic and Review of Infodemic Information Flow**

With the spread of internet use around the world, social media platforms that offer the opportunity to interact online, strengthen relationships, share ideas, create content, collaborate, attract other people's attention and create a social image, (Boyd and Ellison, 2007; Kaplan and Haenlein, 2010; Kietzmann, et al., 2011), are used as the most effective way to search and communicate instantly or process information during major events such as political events, sports events, natural disasters and diseases (González-Padilla and Tortolero-Blanco, 2020; Li, et al., 2020). Social media platforms, a powerful propaganda tool at special times in the country or around the world, (Obi-Ani, et al., 2020) played an important role in accessing information and disseminating information to the public during the quarantine period applied globally (Rovetta and Bhagavathula, 2020; Srivastava, et al., 2020).

The ambiguity of the details, the lack of information, the lack of any treatment method, the emergence of the disease with different symptoms in people, and the difficulty of following up the current data regarding the new type coronavirus, the first cases of which began to be reported in December 2019 (Pan, et al., 2020; Zhai and Du, 2020) and which led to the declaration of a pandemic shortly after, with isolation and social distancing regulations implemented by governments, has led people to seek alternative sources of information (Cinelli, et al., 2020; Hua and Shaw, 2020). Social media sites, which stand out among these alternative sources of information, provide people with the opportunity

to follow the developments around the world instantaneously, as well as emphasize the importance of obeying the isolation and social distancing rules implemented by governments, and also as a motivating element to calm the general panic situation and create an atmosphere of trust (Depoux, et al., 2020; Farooq, et al., 2020). In addition, social media platforms, which are based on factors such as structural, social, cultural and psychological participation, sharing and resource enhancement among communities, take on a great responsibility for people in terms of the spread consistent and reliable information that is clear enough to eliminate confusion and create awareness in today's conditions (Ling, et al., 2019; Duraisamy, et al., 2020).

Today, the creation, sharing and circulation of information in parallel with the modern structure of society is an important part of our cultural, social and economic life (Duraisamy, et al., 2020). From this point of view, social media platforms, unlike traditional mass media, are an effective alternative communication method in terms of free and rapid access to existing information in pandemic conditions, (Chan, et al., 2020; Cinelli, et al., 2020) where rapid access to reliable information regarding Covid-19, which poses a significant risk to public health on a global scale, is essential (Hua and Shaw, 2020). Social media sites, which are the primary source of information for a large number of users under the current circumstances and not only for the dissemination of daily or instant developments, but also for the support of the dissemination of their knowledge in academic terms, also act as a user

guide of sorts during the pandemic (Johannsson and Selak, 2020; Rovetta and Bhagavathula, 2020).

Social media platforms that create a widespread network of resources to access potential and important information in the 21st century and add different dimensions to the concept of communication at digital levels, in the pandemic process, is also often used not only by people, but also by governments to efficiently share real and up-to-date information (Chen, et al., 2020; Lima, et al., 2020). Social media sites where people can create groups according to their interests and form the basis of the communication element by sharing photos, videos and links, (Boyd and Ellison, 2007; Kaplan and Haenlein, 2010) come to the forefront as an alternative communication and news source to share the developments regarding the course of the disease by official institutions and authorized persons during the epidemic period, to announce new measures and decisions, to introduce the treatment methods applied, to explain the progress of vaccine development efforts around the world, to convey the most up-to-date information provided by healthcare professionals, and to take the necessary measures, and offering recommendations regarding the importance of complying with the measures being taken (Chan, et al., 2020; Merchant and Lurie, 2020). In addition, social networking sites that people often use to overcome the psychological difficulties they experience in the process of social isolation or, as it is commonly known, quarantine, (Chen, et al., 2020; Farooq, et al., 2020; Mohindra, et al., 2020) have also emerged as the leading form of communication for expressing problems

experienced such as the loss of employment, being forced to take unpaid leave, being forced to work in environments that do not comply with social distancing rules, moving away from ones education process and not having the sufficient materials required for distance learning, health needs not being sufficiently met, being subject to travel restrictions, experiencing significant economic problems and for stating demands that they wish to be met (Depoux, et al., 2020; Huynh, 2020; Li, et al., 2020; Oum and Wang, 2020; Srivastava, et al., 2020; Tisdell, 2020; Wilder-Smith and Freedman, 2020).

In addition to the advantages provided by social media sites in line with the importance of sharing accurate information and rapid access to this information during the pandemic process, there are also disadvantageous situations such as spreading false information and shares that may put public health at risk (Apuke and Omar, 2020; Duraisamy, et al., 2020). Social media platforms that are open, encourage dialogue and offer people simultaneous interaction and communication opportunities with their participation structure, (Kietzmann, et al., 2011; Bonsón, et al., 2019) carry some risks in this critical process around the world (Islam, et al., 2020). The sharing of misleading and false information, an event as old as time, is also often experienced in the coronavirus process through social media, which is quite often used and popularized by people, and this situation reaches alarming proportions (Waszak, et al., 2018; Perakslis and Califf, 2019; Wasserman and Madrid-Morales, 2019). Social media sites that people use to primarily follow official statements, given directives, procedures

and instant notifications; exposes its users to false and sensationalist information pollution for the purpose of gaining profit by increasing the views, reading and clicking on trending topics of untrustworthy and unofficial sources (Pulido, et al., 2020; Zhou, et al., 2020). Spreading fake news, conspiracy theories, false information and sharing misleading medical advice through social networking sites such as Facebook, Twitter, YouTube, Instagram and WhatsApp can lead to fear in society, increased panic and public health problems that are unlikely to be corrected (Chen, et al., 2020; Laato, et al., 2020; Zarocostas, 2020). Social media platforms which people have selected as a source of information for themselves and their families due to ease of sharing information, have brought a significant risk of serious health problems due to false, misleading and fake treatment and prevention methods particularly during the Covid-19 pandemic process, with methods without any foundation in truth such as drinking salt water, bleach, eating thyme, turmeric and consuming excessive doses of vitamin C being shared (Apuke and Omar, 2020; Duraisamy, et al., 2020; Lampos, et al., 2020). In addition, conspiracy theories and propoganga such as the virus being a biological weapon that was produced in a laboratory environment by big technology, as well as racist and humiliating theories such as that China had spread the virus to cause a serious health and economical problem in the world, that people living in China will eat anything without considering the health effects have been seen regularly on social media during the pandemic process (Ajilore and Thames, 2020; Devakumar, et al., 2020). Social media sites, which have turned into platforms with a high content volume due to their human-

oriented structure, have failed in controlling the content, detecting wrong information and raising awareness against this information (Vosoughi, et al., 2018; Kim, et al., 2019; Roy, et al., 2020).

## **Conclusion**

The Covid-19 (novel coronavirus) epidemic, which emerged in Wuhan, located in China's Hubei province, in December 2019 and affected the whole world in a short period of time, causing the declaration of a pandemic by the World Health Organization, is cited as one of the greatest disasters of the modern age. This epidemic has caused major problems on a global scale as governments and health institutions do not have exact information about this virus, the lack of an existing treatment method, and insufficiencies in combatting the virus. The inability of governments to solve the existing problem with restrictions, prohibitions and social distancing rules that they have applied since the beginning of the pandemic has made things even more difficult. Adverse developments, especially in the field of economy and health, left the governments, especially the people living in that society, helpless, and caused the healthcare professionals, who made extraordinary efforts in this process, to become worn out.

The Covid-19 pandemic process, which caused the reshaping of all social norms both socially and culturally, also played a huge role in changing the way people communicate. Social media platforms, which stand out in today's technologies and offer great changes compared to traditional methods of communication, have managed to become one of

the most important actors in this process. Social media platforms, which are preferred as the primary source for communication on important issues such as the interests of societies, political issues, sports events, artistic events, natural disasters, have come to the fore as digital media that are used intensely by their users during the pandemic process. People who try to follow all the developments related to the outbreak and access up to date information about the course of the disease and the necessary precautions that can be taken from social media sites, also monitor the directives given by officials, the data announced and the last minute developments published by governments through social media. In addition to this information, they are seeking solutions by expressing their own economic and social problems on these platforms and trying to reach the authorities, while also using social media platforms as a way of counteracting psychological problems in terms of social isolation. In addition to the benefits they offer in this process, being faced with false, misleading and unsubstantiated information, exposure to fake news, and access to disease prevention methods that will put their health at risk are shown as the biggest handicaps of social media sites.

Social media platforms, which mediate the development of great social solidarity in societies, also provide great benefits to people in this sense. Artists organizing concerts in order to boost morale and provide support for people during the pandemic process, experts establishing sports activities, diet programs and personal development trainings on social media, paid book platforms offering many publications such as books

and magazines available to users free of charge on social media sites during this process, and the fact that celebrities are in constant contact with their followers on social media to offer support are also among the benefits of these digital platforms provided to their users. In addition, social media sites offer important benefits to people in the academic and business life, such as holding conferences, trainings, lectures, seminars and organizing meetings.

Social media sites, which play a leading role in all critical processes around the world, also provide great benefits to their users despite their disadvantages in the pandemic process. The first priority of social media sites is the obligation to provide the users with the necessary content controls to eliminate the disadvantages and provide access to real information. In addition, it is very important for users to increase their awareness of digital literacy and receive the necessary training on this issue at the point of distinguishing between true or false information.

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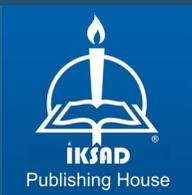
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