




## Article

# Changes in Consumer Behavior during the COVID-19 Pandemic: A Comparative Analysis between Polish and Turkish Consumers

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**Abstract:** Undoubtedly, the COVID-19 pandemic has left an indelible mark on every aspect of human life, and, perhaps most significantly, on the operation of the world's economy. Restrictions and limitations on freedom of movement had a clear impact on the ways in which companies and households functioned, and consumer behaviors and purchasing habits were demonstrably influenced in turn. Thus, the aim of this article is to illustrate these changes in light of the pandemic and, moreover, to highlight the related challenges pertaining to purchasing practices and consumer concerns. The study sample focused on students from Poland and Turkey, with data gathered using an online survey method. The resulting data were subsequently analyzed with the SPSS 26 program. The application of Pearson Chi-Square methods, as well as the analysis of descriptive statistics such as percentage and frequency, revealed significant differences between the two countries. As a result of the comparative analysis, clear differences were demonstrated in the nature of changes in consumer behavior between respondents from Turkey and Poland, most strikingly, the fact that the purchasing habits of respondents in Turkey have changed to a greater extent. It has been observed that limitations imposed during the COVID-19 pandemic had a greater impact on consumer behavior, particularly for students in Turkey.

**Keywords:** pandemic COVID-19; consumer behavior; purchasing habits



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## 1. Introduction

The effects of the COVID-19 pandemic have been felt on an unprecedented global scale. While the consequences of the disease itself cannot be underestimated, it is vital to also take into account the repercussions of the crisis on local and global markets [1–3].

In addition to the effects on the market itself, the sheer duration and the ensuing uncertainty of the pandemic has inevitably taken its toll on the mental condition of communities worldwide [4–7]. A clear picture of the long-term effects of the continuing COVID-19 pandemic will not emerge for many years to come. Nonetheless, scientists around the world are currently attempting to analyze the impact of the pandemic based on what is known so far, and to put forward potential solutions aimed at limiting the transmission of the virus so as to reduce the risk to human life ([8], pp. 1–2).

Food systems in general have been compromised by the changes in consumer behavior due to the pandemic, but one of the industries hardest hit by subsequent negative effects is the agri-food sector. Changes in this field in the United States have been reported by

Orden et al. [9], Weersink et al. [10], and Bender et al. [8]. In light of the research conducted, the authors indicate increased research activity on a global scale in terms of willingness to consider the responses of all those involved in the food chain at every level.

There is no doubt that frequently changing consumer preferences play a crucial role in the food system, with numerous factors influencing such changes even during periods of stability. The pandemic has given rise to a number of additional factors to those evident previously, and as such, the ways in which consumer behavior has been affected is becoming an increasingly popular topic among scientists. A detailed analysis of the theoretical reasons for changes in consumer behavior in the area of their needs and preferences can be found in the work of Das et al. [11], in which the authors state that environmental, social, biological, cognitive and behavioral events are of major importance here. Pandemics such as the COVID-19 pandemic may contribute to changes in consumption behavior manifested by stabilization and more detailed planning of expenditure in fear of unexpected problems, such as rising prices amid rising inflation and recession.

An interesting summary of the current research into global effects on online shopping was presented by D. Truong [12]. Based on research carried out in the USA, South Korea, China, Taiwan, India, Bangladesh, Yemen, Germany, Italy, Slovakia and the Czech Republic, it was found that the recent shift in consumer activity towards online shopping has been influenced by factors such as the desire to avoid physical direct contact, fear of COVID-19, and the impact of the media and social norms. The study also indicates that purchasing decisions are additionally influenced by demographic factors such as age, education, region, race and number of children, as well as individual preferences.

Ordinarily, the purchasing habits of a population are gradually shaped over time. Due to the restrictions related to the pandemic, necessity dictated that these habits had to be changed relatively rapidly [13–15]. An interesting case of alterations to consumer behavior in Brazil is presented by Rodrigues et al. [16]. They found that during the time of the Coronavirus crisis, Brazilians began to eat at home much more frequently, choosing to prepare meals from scratch. In addition, more attention was paid to the hygienic aspects of purchased goods, especially given the fact that the main components of the Brazilian shopping basket are basic animal, vegetable and bakery products. Quantitative changes in purchased goods were also noted: consumers started to focus on more economical (that is to say, larger) packaging. Attention was also paid to the necessity of staying at home and limiting mass visits to marketplaces, with the result that much purchasing activity was transferred to various internet platforms and delivery services. Such changes obviously required switching to cashless payment methods, which had not previously been common practice [17].

Changes in consumer attitudes were also noted in the USA. Kirk and Rifkin point to a do-it-yourself trend that includes a number of newly popular activities, from self-catering, baking and DIY, to maintaining a home garden. The authors also suggest that as a result of the lockdown, families have taken to using their time more actively and interactively, opting to spend time, for example, playing together and enjoying each other's company, rather than in isolation [18]. They also suggest that this is the period of the most intensified independent gastronomic activity among Americans in 50 years [19].

The social group that has been most affected by the pandemic and its related limitations is unquestionably schoolchildren and students. Any restrictions related to limiting mobility and direct interpersonal contact are extremely likely to have a profoundly damaging impact on the psyche of young people [20] and the quality of their education [21]. Changes in consumer behavior among students during the pandemic were addressed by research conducted in Great Britain [22], which demonstrates that having to function in a state of confinement is not at all conducive to student well-being. Zabłocka-Żytka [23] writes extensively on the mental state of students during the pandemic, highlighting the fact that a greater degree of support is required by this group in particular. Aspects of the psychological condition and physical development of young people during the pandemic have also been discussed by Przyborowska and Błajet [24].

Changes in consumer behavior are reflected on the supply side of the market. It is essential that firms have the capacity to adapt to shifting consumer needs, even under exceptional circumstances such as the pandemic and lockdown [25]. To this end, it is obviously necessary for companies to properly obtain and verify information [26,27]. Undoubtedly, as the authors emphasize, the pandemic changed almost every aspect of our lives, and the related shifts in consumer attitudes and preferences necessarily oblige suppliers of goods and services to introduce and implement new solutions in order to meet their requirements [28].

According to the authors' knowledge, the most recent literature focuses mainly on descriptions of consumer behavior in general. The authors of the study undertook the task of comparing the consumer behavior and purchasing habits of groups of Polish and Turkish students. It was concluded that the lack of comparative analyses between the phenomena occurring in different countries constitutes a scientific gap, the filling of which will constitute a significant contribution to the development of processes aimed at limiting the negative effects of the pandemic. Therefore, the comparative analysis of this paper aims to go some way toward bridging this gap.

## 2. Materials and Methods

The basic assumptions of the study are that consumer behavior and purchasing habits during the COVID-19 pandemic changed, and that those changes differed according to geographical location. Furthermore, it is assumed that there is a considerable difference between the impact of the COVID-19 pandemic on Polish consumer behavior and that of Turkey. The paper below consists of a literature review presenting an accurate theoretical background to consumer behavior during the COVID-19 pandemic. In addition to the literature review, research surveys were conducted using an online survey method via google-docs. The data obtained by the survey was then analyzed with the SPSS 26 program, and subsequently by means of descriptive statistics such as percentage, frequency and Pearson Chi-Square methods. In line with the aim of the study, Pearson Chi-Square analysis was used to reveal the difference between the shopping habits of the students of the two countries. Person Chi-Square is commonly used to test for significant differences between two or more groups. An example of Person Chi-Square can be found in Gürsoy S. [29] writing about the impact of the coronavirus on financial markets in terms of regional proximity, or in Serpil Aktaş Altunay et al. [30] writing about the examination of the effects of the democratic measures of the countries during the COVID-19 pandemic process with a homogeneous uniform relationship model. Moreover, Pearson Chi-Square analysis was used to evaluate the impact of the COVID-19 pandemic on access to health services conducted by Emine Çetin Aslan [31]. Referring to the research carried out for this article, the study was conducted among students of Hittite University in Turkey and Siedlce University of Natural Sciences and Humanities in Poland. A total of 300 students were selected, 150 from Hittite University and 150 from Siedlce University of Natural Sciences and Humanities, using the easy sample selection method. Research was carried out on January 2022, thus during the pandemic; however, it was the period of time when the pandemic was weakening in both countries, and the overall impression it left in the consumer's mind was passible to examine. Table 1 shows the demographic characteristics of the participants.

**Table 1.** Demographic characteristics of research participants.

	Turkey		Poland		All Participants	
	N	%	N	%	N	%
Gender						
Female	85	56.7	98	65.3	183	61.0
Male	65	43.3	52	34.7	117	39.0
Total	150	100.0	150	100.0	300	100.0

Table 1. Cont.

	Turkey		Poland		All Participants	
	N	%	N	%	N	%
<b>Age</b>						
18–20	62	41.3	67	44.7	129	43.0
21–23	35	23.3	46	30.7	81	27.0
24–26	11	7.3	22	14.7	33	11.0
26+	42	28.0	15	10.0	57	19.0
<b>Monthly Expenses *</b>	N	%	N	%	N	%
Between PLN 500 and 1000	11	7.3	67	44.7	78	26.0
Between PLN 1000 and 1500	40	26.7	47	31.3	87	29.0
Between PLN 1500 and 2000	40	26.7	15	10.0	55	18.3
PLN 2000 and Above	59	39.3	21	14.0	80	26.7
<b>Accommodation</b>	N	%	N	%	N	%
Student Apartment	12	8.0	29	19.3	41	13.7
Private Dormitory	15	10.0	0	0	15	5.0
State Dormitory	51	34.0	23	15.3	74	24.7
With Family	34	22.7	98	65.3	132	44.0
Student House	38	25.3	0	0	38	12.7
<b>Field of Study</b>	N	%	N	%	N	%
Social Sciences	59	39.3	116	77.4	175	58.4
Science	41	27.3	17	11.3	58	19.3
Health Sciences	8	5.4	5	3.3	13	4.3
Other	42	28.0	12	8	54	18
<b>Year of study</b>	N	%	N	%	N	%
Year 1	21	14.0	27	18.0	48	16.0
Year 2	43	28.7	37	24.7	80	26.7
Year 3	33	22.0	45	30.0	78	26.0
Year 4	53	35.3	41	27.3	94	31.3
<b>Total</b>	<b>150</b>	<b>100.0</b>	<b>150</b>	<b>100.0</b>	<b>300</b>	<b>100.0</b>

Source: Own study, based on research survey. \* monthly expenses in both countries are calculated and expressed in Polish Zlotych, where EUR 1 is ca. PLN 4.5.

Turkish students constitute the largest group of international students studying in Poland under exchange programs [32]. That is why the study sample consisted of young people within these two groups. In terms of the demographic characteristics of the study sample, 56.7% of the surveyed students in Turkey were women and 43.3% men, while 65.3% of the students in Poland were women and 34.7% men. When Table 1 is analyzed, it can be seen that the student participants from both countries were mostly between the ages of 18 and 20. There is no clear pattern to the monthly expenses of the students participating in the survey, but it can be observed that the majority spent between PLN 1000 and 1500. It is also noteworthy that students' monthly expenditure was much higher in Turkey than in Poland; more than 39% of the students in Turkey spent PLN 2000 and above. This could well be attributed to severe inflation in Turkey and increasing living costs in comparison to Poland. In terms of accommodation, 60% of the students in Turkey claimed that they stayed in state dormitories and students houses, while 65% of the students in Poland stated that they stayed with their families—another possible reason for lower expenses. Regarding the fields of study, 39.3% of students in Turkey were trained in social sciences, 27.3% in science

and 5.4% in health sciences. In contrast, 77.4% of the students in Poland responded that they studied in social sciences, 11.3% in science and 3.3% in health sciences. In terms of the year of study, 14% of the students in Turkey were in their first year, 28% in their second, 22% in their third and 35.3% in their fourth. A total of 18% of students in Poland were in the first year of study, 24.7% the second, 30% the third, and 35.3% stated that they were fourth-year students.

### 3. Results

Taking into account the main assumption and the aim of the research, descriptive statistical analyses with a Pearson Chi-Square test was used to determine the differences between the consumer behaviors of both countries during the COVID-19 pandemic. Detailed analyses and interpretations of the study data are presented below.

Table 2 shows the consumption practices of students in Turkey and Poland during the COVID-19 pandemic. When analyzing the results of the survey, it is noticeable that the most frequently purchased group in both countries was food products (66.3% of all the categories mentioned above). Conversely, the smallest number of respondents indicated that they had made purchases within the education category (4.0%). Considering the diversity of responses among students from Poland and Turkey, it was determined that there was no significant difference between the students of the two countries and the most purchased product groups during the pandemic period, as demonstrated by the Pearson Chi-Square test. On the other hand, when asked about changes in their purchasing habits during the COVID-19 pandemic, there was high differentiation in answers between students from Poland and Turkey. A total of 82.7% of the students in Turkey stated that there had been a change in their purchasing habits, while 60% of students in Poland stated that their shopping habits had not changed. The Chi-Square analysis was used to confirm the difference in the changes of purchasing habits of Poland and Turkey students during the pandemic. According to the analysis, asymptotic significance was found to be less than 0.05. In this case, it can be said that there is a considerable difference between the shopping habits of the students in Poland and Turkey. During the pandemic in Turkey, students had to change their shopping habits dramatically, much more so than the students in Poland. Differentiation in answers can also be observed when analyzing the distribution channels used during the pandemic, with the literature review revealing that online shopping was one of the most used in that time. This was confirmed by the responses of Turkish students, as 40% of the respondents had chosen online channels and 46.7% mixed channels. A different situation presented itself in the answers of the Polish students, as the majority of them (51%) indicated physical shopping as their most commonly chosen distribution channel. The Pearson Chi-Square test at  $p < 0.05$  was found. This confirms that there is a significant difference between distribution channel preferences between students of those two countries. However, taking all respondents from Poland and Turkey together into account, our assumption about increasing interest in online shopping has been supported, with 61% of all students claiming that they do online shopping more often than they had before pandemic. In the next part of the research, students were asked about changes in buying particular products. When asked whether there were any products or services that students gave up on buying during the pandemic, 76% of Turkish students confirmed that they had, while the majority of Polish students (69.3%) stated that they had not given up buying any products or services. A common tendency towards spending on education and entertainment can be observed: 79.33% of Turkish students claimed that their expenditure in these areas had changed (88%), while Polish students responded that theirs had not. Therefore, it can be seen that students in Turkey were more affected by the pandemic restrictions, and these effects were reflected in their purchasing habits and consumer behavior.

**Table 2.** Determining consumer behavior differences during the COVID-19 pandemic.

Which product group have you purchased the most during the pandemic?	Turkey		Poland		All Participants	
	N	%	N	%	N	%
	150	100.0	150	100.0	300	100
Technology	17	11.3	23	15.3	40	13.3
Food	101	67.3	98	65.3	199	66.3
Health	8	5.3	18	12.0	26	8.7
Education	8	5.3	4	2.7	12	4.0
Other	16	10.7	7	4.7	23	7.7
Pearson Chi-Square	Value: 16.325		Df: 5		Asym. Sig.: 0.294	
Have you changed your purchasing habits during the pandemic?	N	%	N	%	N	%
	150	100.0	150	100.0	300	100.0
Yes, I have	124	82.7	60	40.0	184	61.3
No change	26	17.3	90	60.0	116	38.7
Pearson Chi-Square	Value: 57.571		Df: 1		Asym. Sig.: 0.000	
Which distribution channels have you used to buy products during the pandemic?	N	%	N	%	N	%
	150	100.0	150	100.0	300	100.0
Online Shopping	60	40.0	25	16.7	85	28.3
Physical Shopping	20	13.3	79	51.3	99	33.0
Both	70	46.7	46	32.0	116	38.7
Pearson Chi-Square	Value: 54.539		Df: 2		Asym. Sig.: 0.000	
How often have you shopped online during the pandemic compared to the past?	N	%	N	%	N	%
	150	100.0	150	100.0	300	100.0
Less	12	8.0	21	14.0	33	11.0
Same	26	17.3	58	38.7	84	28.0
To a greater extent	112	74.7	71	47.3	183	61.0
Pearson Chi-Square	Value: 23.831		Df: 2		Asym. Sig.: 0.000	
Have there been any products or services that you gave up on buying during the pandemic?	N	%	N	%	N	%
	150	100.0	150	100.0	300	100.0
Yes	114	76.0	46	30.7	160	53.3
No	36	24.0	104	69.3	140	46.7
Pearson Chi-Square	Value: 61.929		Df: 1		Asym. Sig.: 0.000	
Have there been any changes in your education spending during the pandemic?	N	%	N	%	N	%
	150	100.0	150	100.0	300	100.0
Yes	119	79.33	66	44.0	185	61.7
No	31	20.7	84	56.0	115	38.3
Pearson Chi-Square	Value: 39.610		Df: 1		Asym. Sig.: 0.000	
Have your entertainment spending changed during the pandemic?	N	%	N	%	N	%
	150	100.0	150	100.0	300	100.0
Yes	132	88.0	89	59.3	221	73.7
No	18	12.0	61	40.7	79	26.3
Pearson Chi-Square	Value: 31.772		Df: 1		Asym. Sig.: 0.000	

Source: Own study, based on research survey.



The distribution of students' answers to the questions about whether they had experienced consumption anxiety during the COVID-19 pandemic is given in Table 3.

**Table 3.** Consumption anxiety differences during the COVID-19 pandemic.

	Turkey		Poland		All Participants	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
<b>Have you made panic purchases during the pandemic?</b>	<b>150</b>	<b>100.0</b>	<b>150</b>	<b>100.0</b>	<b>300</b>	<b>100.0</b>
Yes	77	51.3	39	26.0	116	38.7
No	73	48.7	111	74.0	184	61.3
Pearson Chi-Square	Value: 20.296		Df: 1		Asym. Sig.: 0.00	
<b>Have you stockpiled food during the pandemic?</b>	<b>150</b>	<b>100.0</b>	<b>150</b>	<b>100.0</b>	<b>300</b>	<b>100.0</b>
Yes	82	54.7	49	32.7	131	43.7
No	68	45.3	101	67.3	169	56.3
Pearson Chi-Square	Value: 14.757		Df: 1		Asym. Sig.: 0.000	
<b>Have you ever worried about losing your source of income during the pandemic?</b>	<b>150</b>	<b>100.0</b>	<b>150</b>	<b>100.0</b>	<b>300</b>	<b>100.0</b>
Yes	120	80.0	52	34.7	172	57.3
No	30	20.0	98	65.3	128	42.7
Pearson Chi-Square	Value: 63.009		Df: 1		Asym. Sig.: 0.000	

Source: Own study, based on research survey.

In Table 3, questions about anxiety connected with the COVID-19 pandemic and consumer habits are presented. As in the earlier stages of the study, Turkish respondents had a stronger reaction to the pandemic restrictions. When asked about panic buying during the pandemic, 51.3% of Turkish students agreed that they had done so, while the majority of Polish students (74%) claimed that they had not. Another observed tendency during the pandemic was the stockpiling of food products. A total of 54.7% of Turkish respondents admitted that they had accumulated food for the future, compared to only 32.7% of Polish respondents. Significant differences were also noted regarding anxiety connected with losing sources of income during the pandemic. In total, 80% of Turkish respondents feared being unable to make a living, in contrast with 34.7% of Polish participants. This disparity was confirmed by the Person Chi-Square test. Overall, it was determined that there was a significant difference between levels of consumption anxiety during the pandemic period between the students from Poland and Turkey. According to the results of the analysis, it is possible to say that consumer anxiety was felt much more keenly by students in Turkey than students from Poland.

The distribution of students' responses to questions concerning problems with product supply during the COVID-19 pandemic is given in Table 4.

In Table 4, the product supply problems experienced by students in Turkey and Poland during the COVID-19 pandemic are presented. A total of 66% of students in Turkey stated that they had had problems with product supply during the pandemic, while 71.3% of students in Poland claimed that they had had no problems in this regard. In response to the question, "Have you experienced a delay in the delivery of the products you ordered during the pandemic?", 75% of the students in Turkey answered "yes", while 62.7% of students in Poland said there had been no delays. Based on Pearson Chi-Square, it can be demonstrated that there is a statistically significant difference between the answers given by students of the two countries in relation to product supply. Based on the survey results, it can be supposed that the supply process in Poland was better managed, and consumers in Poland were able to access the products they required easily and without delay.

**Table 4.** Pearson chi-square analysis on identifying the differences in product supply during the pandemic.

	Turkey		Poland		All Participants	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
<b>Have you had problems supplying the products you purchased during the pandemic?</b>	<b>150</b>	<b>100.0</b>	<b>150</b>	<b>100.0</b>	<b>300</b>	<b>100</b>
Yes. I had problems	99	66.0	43	28.7	142	47.3
No. I didn't have any problems	51	34.0	107	71.3	158	52.7
Pearson Chi-Square	Value: 41.933		Df: 1		Asym. Sig.: 0.000	
<b>Have you experienced delays in the delivery of the products you ordered during the pandemic?</b>	<b>150</b>	<b>100.0</b>	<b>150</b>	<b>100.0</b>	<b>300</b>	<b>100</b>
Yes	113	75.3	56	37.3	169	56.3
No	37	24.7	94	62.7	131	43.7
Pearson Chi-Square	Value: 44.026		Df: 1		Asym. Sig.: 0.000	

Source: Own study, based on research survey.

#### 4. Discussion

As has been stated, the pandemic has had a colossal impact on the functioning of individual households as well as economies all over the world. However, it is clear that this impact is experienced differently according to geographic location and culture, and its broader effects are, and will be, determined by many different factors besides. It has also been indicated by the literature review that purchasing habits are additionally influenced by many factors, such as, among others, demographic and education. It is for this reason that this paper focuses on a particular sample group of students in the same age group, despite the fact that they come from different countries and cultures.

Based on this analysis, significant differences have been observed between the purchasing habits and consumer behavior of the Polish and Turkish study samples. In the past, research has been carried out on a similar study sample, i.e., Polish and Turkish students from a random selection of gender or age. The study was conducted simultaneously in both countries when their respective pandemic situations were similar, with similar restrictions in place. In spite of this, changes in consumer behavior and purchasing habits were ascertained to be much more pronounced in Turkey than in Poland.

At the beginning of the study, it was clear that food products were the most frequently purchased group in both countries during the pandemic. However, further analysis revealed higher differentiation in respondents' answers. Poland is a country where food products are mainly sold through traditional distribution channels [33]. This may explain why, when asked in subsequent questions about buying channels, 16% of respondents from Poland answered that they chose online shopping, compared to 40% of Turkish participants. In Poland, despite limitations on mobility, physical shopping was still the most popular form of purchasing (51.3%). The determining factor may be the fact that students in Siedlce University who took part in the research tended to live in a smaller populated region or rural areas where deliveries of food products were not always available. What is more, 65.3% of respondents from Poland live with their parents. This may also influence students' monthly expenses as well as their purchasing habits. Rossolov et. al [34] write about the directions of changes in shopping habits among young people, saying that the pandemic period is conducive to increasing interest in online shopping, and depending on the economic situation of the country, the attitudes of consumers—young adults—may differ in terms of willingness to buy or save.

Further differences in consumer behavior between Polish and Turkish students have been demonstrated in terms of their frequency of shopping, whether or not they chose to refrain from buying particular products, and if they limited spending on education or entertainment. Based on the answers, it can be assumed that the organization of every-



day life has changed more in Turkey than in Poland. A similar situation was observed regarding the consumption anxiety connected with the COVID-19 pandemic. Turkish students experienced it to a greater extent, as is evidenced by a tendency towards panic buying, stockpiling of food, and expressing concern about losing their source of income. Furthermore, obstacles connected with product supply were demonstrated to have been experienced more frequently by Turkish students. The causes of students' purchasing behavior were also of interest to Theriot et al. [35]. The authors, based on a study conducted among American students, concluded that the shopping panic accompanying especially the initial wave of the pandemic was not chaotic from the perspective of the respondents. Purchasing decisions were made mainly on the basis of the nutritional value of the products, followed by more sophisticated criteria.

## 5. Conclusions

In light of the information provided by the literature review, as well as in media coverage regarding the overall impact of the COVID-19 pandemic, it can be stated that there have been far-reaching changes in consumer behavior and shopping habits. Nevertheless, it should be borne in mind that the severity of these changes varies significantly from country to country and is influenced by many different factors. Based on our research, it is certain that the factor that most differentiates changes in consumer behavior is geographical. As a result of the comparative analysis, clear differences were demonstrated in the nature of changes in consumer behavior between respondents from Turkey and Poland, most strikingly the fact that the purchasing habits of respondents in Turkey have changed to a greater extent. The pandemic had a greater impact on their behavior in the marketplace.

It must be noted that the research sample under study was specific in terms of its characteristics, and the results of the study should not be generalized to all consumers from Turkey and Poland.

Nevertheless, the COVID-19 pandemic was an event that will go down in the history of the world. The consequences that it will have for the future cannot possibly be predicted; hence, it is vitally important to undertake scientific research and analyze the behavior of consumers during this period, so as to better equip generations to come with the tools to tackle seismic global changes of this magnitude. That is why it is worth continuing the research that has been undertaken in a broader scale. Essential insight to further research would bring detail consideration of the changes in a consumer behavior during COVID-19 pandemic with regard to different factors such as economic, social and geographical. Thus, further studies should focus on searching the reasons of consumer behavior changes and its determinants.

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