

## A STUDY ON CUSTOMER PERCEPTIONS AND ATTITUDES TOWARDS DIGITAL COUPONS

DİJİTAL İNDİRİM KUPONLARINA DAİR MÜŞTERİ ALGISI VE DAVRANIŞI ÜZERİNE  
BİR ARAŞTIRMA

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### ABSTRACT

Digital coupons, generally considered as a marketing strategy to increase sales and customer loyalty, are important elements in the observation of customer attitudes and perceptions. The main question in the literature is whether these coupons should be redeemed or not, and their effectiveness is discussed depending on their use. However, even if digital coupons are not redeemed after they are acquired in online environments, the way they are obtained or perceived can provide marketers with information about customer attitudes and behaviors. This study aims to determine the effectiveness of digital coupons in digital business models based on consumers' perceptions and attitudes. Attitudes towards digital discount coupons were examined using 10 different dimensions and how these dimensions were influenced by various variables was questioned. The study surveyed 300 participants. As a result of the analysis, it was revealed that the impact of digital coupons on online purchase behavior should be considered from a holistic perspective. Accordingly, other benefits that coupons create for sellers should not be overlooked in addition to coupon redemption.

**Keywords:** Customer behavior, digital marketing, customer perception, digital coupon

**JEL Codes:** M30, M31

### ÖZET

Genellikle satışları ve müşteri sadakatini artırmaya yönelik bir pazarlama stratejisi olarak kabul edilen dijital kuponlar, müşteri tutum ve algılarının gözlemlenmesinde önemli unsurlardır. Literatürdeki temel soru, bu kuponların kullanılıp kullanılmaması gerektiğidir ve kullanımlarına göre etkinlikleri tartışılmaktadır. Ancak, dijital kuponlar çevrimiçi ortamlarda edinildikten sonra kullanılsa bile, elde edilme veya algılanma şekli işletmelere müşteri tutum ve davranışları hakkında bilgi sağlayabilir. Bu çalışma, tüketicilerin algı ve tutumlarına dayalı olarak dijital iş modellerinde dijital kuponların etkinliğini belirlemeyi amaçlamaktadır. Dijital indirim kuponlarına yönelik tutumlar 10 farklı boyut kullanılarak incelenmiş ve bu boyutların çeşitli değişkenlerden nasıl etkilendiği sorgulanmıştır. Çalışma kapsamında 300 katılımcıyla anket yapılmıştır. Analiz sonucunda dijital kuponların online satın alma davranışı üzerindeki etkisinin bütüncül bir bakış açısıyla değerlendirilmesi gerektiği ortaya çıkmıştır. Buna göre, kuponların sadece kullanılmasının değil, satıcılar için yarattığı diğer faydaların da gözden kaçırılmaması gerekmektedir.

**Anahtar Kelimeler:** Müşteri davranışı, dijital pazarlama, müşteri algısı, dijital kupon

**JEL Kodları:** M30, M31

## 1. INTRODUCTION

The Covid 19 pandemic impacted businesses, regardless of size or scope. While some globalized and renowned companies went bankrupt during this time, some companies that used digital marketing effectively made huge profits. Some companies even managed to leave their competitors behind through effective digital marketing. Determining and implementing the right strategies by identifying the requirements and needs of consumers in digital marketing has become an important advantage for businesses (Pandey, 2021: 108). To achieve the best results in digital marketing, one must focus on building long-term relationships with each consumer. To develop a positive, strong and long-lasting customer experience, it is necessary to invest in many initiatives.

Digital discount coupons are one of the initiatives used as a marketing strategy to boost sales and increase customer loyalty. As digital marketing aims to provide a wide range of personal data mining tools to collect data for the business owner and third parties and refine their micro-targeting algorithms to develop new products and services while improving the current ones, the importance of using digital coupons effectively is evident (Guilbeault, 2018: 35).

In general, a coupon is a certificate that provides an incentive for the consumer to purchase a service or product. The incentive is usually a discount. However, coupons are also used for combined offers, refunds or other types of promotions (Dias et al, 2015: 92). Digital coupons are discounts and promotions offered to current or potential customers online or through a mobile platform. Although printed discount coupons have been popular among consumers for a long time, digital coupons only became widely used and in demand in the late 2000s. The rise in demand for digital coupons in the late 2000s was attributed to the widespread use of internet shopping and economic shortages (Turow, 2012: 104). The most popular types of digital coupons are downloadable coupons that can be accessed directly from a website, via email, or through social media; mobile coupons offered by e-commerce platforms that integrate mobile applications into their operations; and discount codes that can be accessed and used more quickly. There are also digital coupons that combine the features and benefits of multiple types of coupons. For example, in the case of Kroger's "Click, Load, Save" campaign, the company, which operates 2,470 supermarkets and department stores in the United States, offered a digital coupon program that allowed consumers to create an account on the website or through a mobile application, select low-cost coupons, and load the coupons directly into their account for automatic redemption at checkout (Kroger, 2010).

To avoid different variables of consumer behavior, it is necessary to limit this study only to digital coupons used in digital shopping. Numerous factors such as the ability to touch and feel, personalization, and accessibility determine the differences between digital shopping and traditional offline shopping. Therefore, the redemption of digital coupons intended for use in traditional shopping channels should be studied in a separate framework. Indeed, the efficiency of digital business models differs significantly depending on discounts or dynamics in the sales process (Wang et. al., 2016: 626). The focus of this study is to determine the effectiveness of digital coupons in digital business models based on consumer perceptions and attitudes.

Redemption rate is considered an important criterion for measuring the effectiveness of coupons. The studies that focus on redemption rate to determine the effectiveness of digital coupons have found that the rate is strikingly low. A redemption rate of only 1.06% has been reported (Danaher et al., 2015: 722). According to the 2018 report by NCH, a business solutions company for ad redemption, verification, billing, and analytics, of the 256.5 billion digital coupons distributed in the United States (US) in 2018, only 1.715 billion coupons were redeemed (nchmarketing.com). It is important for marketers to identify and analyze digital coupon redemption to develop effective marketing strategies.

The significance of digital coupons is determined not only by redemption, but also by how they attract new customers or build customer loyalty. Every marketing message is required to match the expectations, demands, and needs of potential customers. However, in digital marketing, there is a wide range of audiences. The economic buyer focuses on price, discounts, and rebates, while the user-focused buyer pays attention to whether or not the product serves the purpose for which it was purchased. Digital content should address all of the issues while utilizing digital coupons. Digital content should consider all aspects when using digital coupons. For some customers, it is the discount offer that makes a coupon attractive, while for others it is just a means to rationalize the purchase decision or to get to the e-commerce website. Therefore, all of these rationales should be scrutinized.

In addition to the widespread adoption of e-commerce, the pandemic period has seen the emergence of a new perspective that goes beyond traditional marketing and sales methods. When it comes to valuation by businesses, it is of great importance to create differences that can attract consumers to their side as competition shifts to digital platforms. To this end, discount coupons that can be used on digital platforms are considered an important competitive tool. Consumers' perception of coupons, which existed from the past to the present, differs with digitization and has implications for purchasing behavior. This study aims to measure how consumers perceive digital coupons and how they influence their purchase decisions and behavior.

## **2. LITERATURE REVIEW**

The studies that have been conducted on digital coupons address a variety of issues, from the efficiency of digital coupons to customers' motivations for using them. The definition and role of digital coupons are also discussed in the literature based on various aspects of digital marketing.

In the literature, two different approaches to the positioning of digital coupons are distinguished. According to the first approach, digital coupons act as triggers for purchase decisions, enticing customers back and increasing customer loyalty and retention (Ahmad and Sanwar, 2018: 37). Therefore, a digital coupon is simply defined as a marketing technique that leads to psychological processes. Similarly, Chaffey and Smith (2008) position digital coupons as a means of persuading the uncertain customer to buy because a well-managed database makes it possible to tailor prices to discrete segments at optimal prices for customers. In this sense, a digital coupon is part of the direct advertising effect and allows marketers to get closer to customers, especially the young customers who are difficult to reach with other media (Chaffey and Smith, 2008: 155).

The consumer's receipt of a discount coupon is a passive influence, while the consumer's proactive search for a coupon is an active influence. Digital coupons are a sales promotion activity, similar to contests and prizes (Bhatia, 2017: 107). However, according to Ryan and Jones (2009), digital coupons are more than a marketing technique, they are a part of digital communication, similar to email marketing, content sponsorship and viral marketing. The authors refer to digital coupons as e-coupons and define the whole concept as "the online distribution of printable discount coupons that can be redeemed at points of sale" (Ryan and Jones, 2009: 224). They are considered as an execution method in a marketing campaign aimed at testing products (Ryan and Jones, 2009: 225). From this perspective, digital coupons are part of an advertising and promotion process. The objectives, which can range from branding to creating likeability and contribute to deepening the brand-customer relationship, place customer loyalty and increasing repurchase rates at the heart of using digital coupons to make further purchases (Zahay, 2020: 110). In comparison, it has been pointed out that digital coupons provide an omnichannel experience that includes immediate and personalized offers that link the loyalty program to the customer's online behavior (Yasav, 2015: 8). What both approaches have in common is that when digital coupons are used properly by businesses, effective results are achieved.

Digital coupons attract a wide range of consumers, and numerous coupon redemption studies highlight the importance of consumer demographic characteristics in explaining the identity of coupon users. However, it is likely that the demographic groups that increasingly use digital coupons change over time, and the influence of demographics as a predictor of consumer behavior and coupon redemption is questionable. With this in mind, Dickinger and Kleijnen (2008) conducted a study on the determinants of consumers' intention to redeem digital coupons, focusing on consumers' non-demographic characteristics. In explaining the results in terms of antecedent-predictor relationships, the study focused on the notion of coupon proneness", i.e., an increased inclination to respond to a purchase offer based on the coupon form of the advertisement. Results showed no significant effect of social norms or prior coupon use on intention to redeem digital coupons. It was concluded that the main reason for customers to use mobile coupons is the lower final price of the product (Dickinger and Kleijnen, 2008: 35).

How digital coupons are dematerialized was analyzed in a detailed literature review by Dias and his colleagues in a 2015 study. The study highlighted that interoperability issues due to different technologies for processing digital coupons play a role in the lower redemption rates of this type of coupon compared to traditional paper format coupons. It was pointed out that since the majority of studies revealed that redemption of digital coupons accounted for only 2% of total redemption, there was a need to establish standards that facilitate the compatibility of different systems in the different stages of digital coupon processing: from creation and communication to redemption, ransom and financial reconciliation (Dias et al, 2015: 94).

In a study conducted by Xing and his colleagues (2020), digital coupons are categorized according to their value. This approach paved the way to identifying a conceptual model of consumer spending with coupons. Large-scale spending stimulus programs that used digital coupons as a tool to boost the economy were evaluated. The researchers reported that low-value, use-it-or-lose-it coupons provide a significant and immediate incentive to purchase at a low cost. They concluded that consumers favored consumption toward pricier options to meet the minimum spending requirements of coupons (Xing, et al., 2020: 33).

The use of digital coupons as a personalization and product development tool has also been the subject of case studies. It has been reported that digital coupons could leverage the company's understanding of customer behavior to promote specific products. As an exercise in online personalization, they also appear to be relatively low-cost activities to observe how millions of people experience the product/service concept in a way that suits the company's best interests. In this regard, Turow (2012) cited a company that sells baby products as an example: a parent with an infant who uses diapers might receive advertisements that reinforce that use, but would choose to redeem the series of online discount coupons she receives for a range of baby products alongside the child's growth. If the coupons can be shared and passed on social networks in a way that is not easily spread in traditional communication networks and social circles, then the company can reach many channels where its target audience hangs out, through word of mouth, without much effort of its own (Gao et al., 2020: 2661).

### **3. METHODOLOGY**

The main limitation of the research is that it was not possible to conduct a face-to-face survey due to the Covid-19 period. The research, which only evaluates the period between May and July 2021, is the period when most participants were living in isolation due to Covid-19 restrictions. It is a pioneer study to reveal whether attitudes and views towards digital discount coupons have changed. Since there is no applied example of consumer attitudes and opinions directly related to digital discount coupons in Turkey, the study aims to make an important contribution to the literature.

The survey was conducted between May and July 2021, as an in-person interview was deemed risky due to the pandemic. It was conducted via social platforms after the permission of the Ethics Committee. 300 people were reached through Google survey forms.

The research involved a quantitative study based on random sampling. A 40-item questionnaire was constructed on the scale developed by Nayal and Pandey (2020). It was administered to the participants in the form of an online multiple choice survey. The analysis was done by analyzing the data obtained through Google Forms using SPSS 23 software.

#### 4. ANALYSIS AND RESULTS

The participants' attitudes and behaviors were examined from different perspectives.

**Table 1. Evaluation of Demographic Aspects and Findings**

N= 300		Frequency	%
Gender	Female	174	58,0
	Male	126	42,0
Age	18-24	144	48,0
	25-34	63	21,0
	35 and above	93	31,0
Level of Education	High school	12	4,0
	Associate's degree	57	19,0
	Bachelor's degree	159	53,0
	Master's degree	42	14,0
Online Shopping Frequency Per Month	Doctoral degree	30	10,0
	1-3	180	60,0
	4-6	69	23,0
	7-9	18	6,0
	More than 10	33	11,0
Average Daily Internet Usage Per Day	1-2 hours	21	7,0
	3-4 hours	90	30,0
	5-6 hours	78	26,0
	More than 6 hours	111	37,0
Average E-commerce Spending Last Month	0-500 TL	180	60,0
	501-1000 TL	57	19,0
	1001-3000 TL	39	13,0
	3001 TL or more	24	8,0
Average Monthly Income	3500 or less	129	43,0
	3501-5000	36	12,0
	5001 or more	135	45,0
Most Frequently Used Social Media Platform	Facebook	18	6,0
	Twitter	39	13,0
	Instagram	204	68,0
	Other	39	13,0
<b>Total</b>		<b>300</b>	

The distribution of demographic characteristics of the study participants is shown in Table 1. The results of this analysis indicate that 58% of the participants were female and 42% were male, 48% of the participants were between 18-24 years old, 21% were 25-34 years old, and 31% were over 35 years old. 53% of the participants (159 individuals) held a bachelor's degree, while high school graduates (12 individuals) were the smallest group in the population at 4%. 60% of participants reported shopping online 1-3 times, 23% 4-6 times, 6% 7-9 times, and 11% more than 10 times in the past month. Evaluation of daily internet use revealed that 37% of participants used the internet for more than 6 hours, followed by those who spent 30% 3-4 hours online, 26% 5-6 hours, and 7% 1-2 hours. 45% of the participants have an income of 5001 TL and above, followed by the group with a minimum income of 3500 TL and below with a rate of 43% and finally the group with an income of 3501-5000 TL with a rate of 12%. In the distribution of the most frequently used social media platforms, Instagram (68%) is the

most frequently visited platform, while Twitter (13%) is second, Facebook (6%) is third, and other social media platforms are fourth.

#### 4.1. Reliability Analysis

The homogeneous structure of the items in the scale was analyzed and explained using the Cronbach's alpha coefficient, which is a measure of the internal consistency of the items. It has been concluded that the items in the scale with a high Cronbach's alpha coefficient consist of items that are consistent with each other and measure the same characteristic (Yıldız & Uzunsakal, 2018: 19). As a result of the reliability analysis of the study, the Cronbach's alpha coefficient was found to be 0.922 (92%). This means that the scale is reliable.

As a result of the factor analysis, it was found that the survey items were grouped under 10 dimensions instead of the 12 dimensions in the model discussed by Nayal and Pendey (2020). One of the important points to consider in factor analysis is the exclusion of items with a factor loading of less than 0.10 from the analysis and their rearrangement. The 37 questionnaire items in the model were categorized into 12 dimensions. The distribution of the survey items addressed to the participants according to the dimensions is as follows:

- 1- Digital Coupon Redemption Tendencies, 5 items (K1,K2,K3,K4,K5)
- 2- Discount Coupon Value Perception, 3 items (I1,I2,I3)
- 3- Coupon Proneness, 4 items (E1,E2,E3,E4)
- 4- Search Tendency, 2 items (A1,A2)
- 5- Attitudes towards Digital Coupon Redemption, 2 items (T1,T2)
- 6- Frequency of Consumption, 3 items (S1, S2, S3)
- 7- Attitudes towards Research on the Internet, 3 items (AR1,AR2,AR3)
- 8- Perceived Risk, 3 items (R1,R2,R3)
- 9- Discount Value, 3 items (D1,D2,D3)
- 10- Innovativeness, 3 items (Y1,Y,Y3)
- 11- Perceived User-Friendliness, 3 items (KO1, KO2, KO3)
- 12- Special Values, 3 items (O1,O2,O3)

**Table 2. Factor Analysis**

Q	Dimension									
	1	2	3	4	5	6	7	8	9	10
k3	,767									
k1	,687									
K2	,657									
k4	,619									
KO2	,417									
D3	,399									
O1		,813								
O2		,719								
O3		,712								
KO1		,474								
KO3		,432								
A1			,689							

T2			,681						
K5			,680						
E1			,515						
S2				,672					
S3				,627					
S1				,605					
D1				,570					
D2				,495					
Y1					,813				
Y3					,564				
Y2					,535				
AR3					,433				
E2						,756			
E3						,660			
I2							,729		
I1							,722		
T1							,408		
E4								,671	
A2								,373	
AR2									,600
AR1									,576
R1									,779
R2									,663
R3									,409

The third item (I3), in which the perception of value for discount coupons is measured, was removed from the analysis (0.443 / 0.441) due to overlapping of the third and sixth dimensions. The items related to the dimensions were reclassified based on the factor analysis. Therefore, the distribution of dimensions can be explained as follows:

The second item of the **Perceived User-Friendliness** dimension and the third item of the Discount Value perception were added as the fifth item to the **Digital Coupon Proneness**. The new dimension consists of 6 items as the **Digital Coupon Proneness** dimension. Since it contains the first and third items of the **Perceived User-Friendliness** dimension and all items of the **Special Values** dimension, the dimension was named the **Perceived Values** dimension. The third dimension is formed by combining different items related to the existence and orientation of discount coupons. The new dimension consists of the first question of the **Search Tendency** dimension, the second question of the **Attitudes towards Digital Coupons dimension**, the fifth question of the **Digital Coupon Proneness** dimension, and the first question of the **Digital Coupon Redemption Tendency** dimension, and was renamed the **Coupon Search** dimension. It was intended to combine all items of the **Frequency of Consumption** and the first two items of the **Discount Value** dimension and was categorized as the **Frequency of Consumption** dimension. The fifth dimension includes the third item of the **Attitudes towards Internet Research** and all items of the Innovativeness dimension. It is therefore referred to as the **Innovativeness** dimension.

The sixth dimension is composed of the second and third items of the **Coupon Proneness dimension**. The denotation has not been changed. Since the seventh dimension includes both items of the Discount Coupon Value Perception dimension and the first item of the attitudes towards digital coupon redemption, it is named as the **Discount Coupon Value Perception dimension**. The eighth dimension consisted of the fourth item of the **Coupon**

**Proneness** dimension and the second item of the research dimension. Hence, it is named the **Discount Tendency dimension**.

Since the ninth dimension includes the first and second items of the **Attitudes towards Research on the Internet** and the tenth dimension includes all three items of the **Perceived Risk** dimension, they are included in the study under the same titles.

## 4.2 Normality Distribution

The Kolmogorov Smirnov Test is used to determine whether the series has a normal distribution if the sample size is higher than 50 and Shapiro Wilk has less than 50 samples. Since the sample size is 300 in this study, Kolmogorov Smirnov Test results were taken into account. Since it was revealed that  $p < 0.05$  (0.000) for all dimensions, the  $H_0$  (normally distributed dimensions) hypothesis was rejected. In other words, the data set was not normally distributed. Accordingly, the research data were evaluated with Non-Parametric tests.

### Analysis of Consumers' Attitudes and Findings on Digital Discount Coupon Redemption

a) Findings on the Differences in Scoring Levels of the Sub-Dimensions of Opinions and Attitudes towards Digital Discount Coupons by Gender

*H<sub>0</sub>: The sub-dimensions of views and attitudes towards digital discount coupons does not differ by gender.*

*H<sub>1</sub>: The sub-dimensions of views and attitudes towards digital discount coupons differs by gender.*

**Table 3. Mann-Whitney U Test Results of Differences in Scoring Levels of Sub-Dimensions by Gender**

Sub Dimension / Gender	N	Mean Rank	Sum of Ranks	Mann-Whitney U	Wilcoxon W	Z	p
Digital Coupon Proneness	Female Male Total	174 126 300	157,39 140,99	27385,50 17764,50	9763,500	17764,500	-1,622 ,105
Perceived Values	Female Male Total	174 126 300	156,60 142,07	27249,00 17901,00	9900,000	17901,000	-1,437 ,151
Coupon Search	Female Male Total	174 126 300	145,04 158,04	25237,50 19912,50	10012,500	25237,500	-1,285 ,199
Frequency of Consumption	Female Male Total	174 126 300	149,09 152,44	25942,50 19207,50	10717,500	25942,500	-,331 ,741
Innovativeness	Female Male Total	174 126 300	143,11 160,70	24901,50 20248,50	9676,500	24901,500	-1,742 ,081
Coupon Proneness	Female Male Total	174 126 300	155,98 142,93	27141,00 18009,00	10008,000	18009,000	-1,309 ,191
Discount Coupon Value Perception	Female Male Total	174 126 300	165,54 129,73	28804,50 16345,50	8344,500	16345,500	-3,586 ,000
Discount Tendency	Female Male Total	174 126 300	153,19 146,79	26655,00 18495,00	10494,000	18495,000	-,639 ,523
Attitudes towards Research on the Internet	Female Male Total	174 126 300	141,59 162,81	24636,50 20513,50	9411,500	24636,500	-2,142 ,032
Perceived Risk	Female	174	151,30	26326,50	10822,500	18823,500	-,190 ,850

The eight dimensions on the views and attitudes of the participants towards the digital coupon redemption and their perceptions of the sub-dimensions do not differ by gender. However it was determined that there was a gender difference ( $p < 0.05$ ) in the dimension of value perception and Coupon Search, as indicated in Table 3. In conclusion, the value perception and research attitudes towards digital discount coupons differ by gender.

b) Findings on the Differences in Scoring Levels of the Participants' Opinions and Attitudes towards Digital Discount Coupons by Age Groups Sub-Dimensions

*H0: The score levels of the sub-dimensions do not differ by age groups.*

*H1: The score level of at least one sub-dimension differ by age groups.*

**Table 4. Kruskal Wallis Test Results of Differences in Scores by Age**

Sub Dimension	Age	N	Mean Rank	Chi-Square	df	p
Digital Coupon Proneness	18-24	144	143,12	3,463	2	,177
	25-34	63	147,21			
	35 and above	93	164,16			
	Total	300				
Perceived Values	18-24	144	144,28	1,642	2	,440
	25-34	63	160,07			
	35 and above	93	153,65			
	Total	300				
Coupon Search	18-24	144	129,04	18,596	2	,000
	25-34	63	159,94			
	35 and above	93	177,33			
	Total	300				
Frequency of Consumption	18-24	144	128,54	24,876	2	,000
	25-34	63	148,48			
	35 and above	93	185,87			
	Total	300				
Innovativeness	18-24	144	151,49	,386	2	,824
	25-34	63	144,62			
	35 and above	93	152,95			
	Total	300				
Coupon Proneness	18-24	144	144,13	3,479	2	,176
	25-34	63	144,86			
	35 and above	93	164,19			
	Total	300				
Discount Coupon Value Perception	18-24	144	146,36	,661	2	,718
	25-34	63	155,19			
	35 and above	93	153,73			
	Total	300				
Discount Tendency	18-24	144	140,72	3,619	2	,164
	25-34	63	158,79			
	35 and above	93	160,03			
	Total	300				
Attitudes towards Research on the Internet	18-24	144	152,31	10,978	2	,004
	25-34	63	121,69			
	35 and above	93	167,21			
	Total	300				
Perceived Risk	18-24	144	168,96	20,622	2	,000
	25-34	63	110,00			
	35 and above	93	149,35			
	Total	300				

The differences between the score levels of the participants according to the age groups are demonstrated in Table 4. When the findings related to age groups are evaluated; it is revealed that there is a significant difference in the sub-dimensions of doing research on the

Internet, Perceived Risk, Frequency of Consumption and Coupons Search whereas there is no difference in the other sub-dimensions.

c) Findings on the Differences between the Scores Levels of the Opinions and Attitudes of the Participants towards Digital Discount Coupons Based on Education Level

*H0: The score levels of the sub-dimensions do not differ by education level.*

*H1: The score level of at least one sub-dimension differs by education level.*

**Table 5. Kruskal Wallis Test Results of the Differences between the Levels of Scores of the Participants by Education Level**

Sub Dimension	Education	N	Mean Rank	Chi-Square	df	p
Digital Coupon Proneness	High school	12	120,75	18,931	4	<b>,001</b>
	Associate's degree	57	144,74			
	Bachelor's degree	159	141,59			
	Master's degree	42	203,04			
	Doctoral degree	30	147,00			
	Total	300				
Perceived Values	High school	12	114,50	3,057	4	,548
	Associate's degree	57	152,71			
	Bachelor's degree	159	149,71			
	Master's degree	42	163,04			
	Doctoral degree	30	147,35			
	Total	300				
Coupon Search	High school	12	149,75	34,273	4	<b>,000</b>
	Associate's degree	57	118,99			
	Bachelor's degree	159	153,44			
	Master's degree	42	210,51			
	Doctoral degree	30	111,05			
	Total	300				
Frequency of Consumption	High school	12	152,88	30,779	4	<b>,000</b>
	Associate's degree	57	122,87			
	Bachelor's degree	159	145,95			
	Master's degree	42	215,32			
	Doctoral degree	30	135,40			
	Total	300				
Innovativeness	High school	12	175,63	14,015	4	<b>,007</b>
	Associate's degree	57	142,26			
	Bachelor's degree	159	143,43			
	Master's degree	42	193,21			
	Doctoral degree	30	133,75			
	Total	300				
Coupon Proneness	High school	12	104,75	7,394	4	,116
	Associate's degree	57	147,50			
	Bachelor's degree	159	153,70			
	Master's degree	42	169,46			
	Doctoral degree	30	131,00			
	Total	300				
Discount Coupon Value Perception	High school	12	135,38	9,999	4	<b>,040</b>
	Associate's degree	57	157,38			
	Bachelor's degree	159	144,74			
	Master's degree	42	183,71			
	Doctoral degree	30	127,50			
	Total	300				
Discount Tendency	High school	12	207,13	22,665	4	<b>,000</b>
	Associate's degree	57	132,89			
	Bachelor's degree	159	146,14			
	Master's degree	42	194,96			
	Doctoral degree	30	122,15			
	Total	300				
Attitudes towards Research on the Internet	High school	12	165,88	14,614	4	<b>,006</b>
	Associate's degree	57	127,58			
	Bachelor's degree	159	155,46			
	Master's degree	42	180,82			

	Doctoral degree	30	119,15			
	Total	300				
Perceived Risk	High school	12	164,88	32,487	4	,000
	Associate's degree	57	163,82			
	Bachelor's degree	159	143,89			
	Master's degree	42	105,39			
	Doctoral degree	30	217,65			
	Total	300				

When the perceptions of the participants towards digital discount coupons were analyzed according to their educational status, it was observed that there was no difference in Coupon Proneness and Perceived Values sub-dimensions ( $p>0.05$ ), while there was a statistically significant difference in all other dimensions ( $p<0.05$ ). Considering the statistical data, it can be concluded that educational status does not affect coupon proneness and Perceived Values. However, it is a variable that affects other sub-dimensions.

d) Findings on the Differences between the Scores of the Sub-Dimensions of Opinions and Attitudes towards Digital Discount Coupons According to the Frequency of Internet Shopping in the 30-Day Period

*H0: The score levels of the sub-dimensions do not differ by frequency of shopping.*

*H1: The score level of at least one group's perception differ by frequency of shopping.*

**Table 6. Kruskal Wallis Test Results of the Differences between the Scores of the Participants Based on Frequency of Internet Shopping in a 30-Day Period**

Sub Dimension	Shopping Frequency per Month	N	Mean Rank	Chi-Square	df	p
Digital Coupon Proneness	1-3	180	135,01	16,073	3	,001
	4-6	69	165,20			
	7-9	18	187,92			
	More than 10	33	183,86			
	Total	300				
Perceived Values	1-3	180	144,35	12,356	3	,006
	4-6	69	139,35			
	7-9	18	170,50			
	More than 10	33	196,45			
	Total	300				
Coupon Search	1-3	180	137,81	11,361	3	,010
	4-6	69	176,38			
	7-9	18	173,33			
	More than 10	33	153,18			
	Total	300				
Frequency of Consumption	1-3	180	129,86	25,705	3	,000
	4-6	69	181,98			
	7-9	18	176,67			
	More than 10	33	183,00			
	Total	300				
Innovativeness	1-3	180	141,62	8,905	3	,031
	4-6	69	150,26			
	7-9	18	188,08			
	More than 10	33	178,95			
	Total	300				
Coupon Proneness	1-3	180	134,08	20,082	3	,000
	4-6	69	182,33			
	7-9	18	141,25			
	More than 10	33	178,59			
	Total	300				

	Total	300				
Discount Coupon Value Perception	1-3	180	134,48	15,961	3	,001
	4-6	69	173,43			
	7-9	18	171,25			
	More than 10	33	178,64			
	Total	300				
Discount Tendency	1-3	180	144,50	4,677	3	,197
	4-6	69	153,17			
	7-9	18	188,50			
	More than 10	33	156,91			
	Total	300				
Attitudes towards Research on the Internet	1-3	180	143,98	9,095	3	,028
	4-6	69	145,98			
	7-9	18	158,14			
	More than 10	33	191,36			
	Total	300				
Perceived Risk	1-3	180	162,01	29,646	3	,000
	4-6	69	123,41			
	7-9	18	74,58			
	More than 10	33	185,77			
	Total	300				

Table 6 demonstrated the findings regarding the differences between the score levels of the sub-dimensions of the participants' views and attitudes towards digital discount coupons according to the frequency of online shopping within a 30-day period. As can be observed from the table, the frequency of 30-day shopping affects the perception of digital discount coupons in all dimensions except the Discount Tendency sub-dimension ( $p=0.197$ ).

d) Findings on the Differences between the Scores of the Sub-Dimensions of Opinions and Attitudes towards Digital Discount Coupons by the Participants' Daily Internet Usage

*H0: The score levels of the sub-dimensions do not differ by the duration of the Internet use.*

*H1: At least one group's perception differs by the duration of the Internet use.*

**Table 7. Kruskal Wallis Test Results of Differences in Scores Based on the Daily Internet Usage of the Participants**

Sub Dimension	Daily Internet Use	N	Mean Rank	Chi-Square	df	p
Digital Coupon Proneness	1-2 hours	21	152,57	14,368	3	,002
	3-4 hours	90	140,71			
	5-6 hours	78	128,21			
	More than 6 hours	111	173,72			
	Total	300				
Perceived norms	1-2 Hours	21	130,36	2,127	3	,546
	3-4 Hours	90	148,25			
	5-6 Hours	78	159,85			
	More than 6 hours	111	149,57			
	Total	300				
Coupon Search	1-2 Hours	21	161,74	1,643	3	,650
	3-4 Hours	90	143,49			
	5-6 Hours	78	146,85			
	More than 6 hours	111	156,62			
	Total	300				
Frequency of Consumption	1-2 Hours	21	119,00	4,418	3	,220
	3-4 Hours	90	154,25			
	5-6 Hours	78	161,06			
	More than 6 hours	111	146,00			

	Total	300				
Innovativeness	1-2 Hours	21	109,79	29,817	3	,000
	3-4 Hours	90	117,80			
	5-6 Hours	78	160,04			
	More than 6 hours	111	178,01			
	Total	300				
Coupon tendency	1-2 Hours	21	96,50	16,073	3	,001
	3-4 Hours	90	157,55			
	5-6 Hours	78	133,77			
	More than 6 hours	111	166,76			
	Total	300				
Discount Coupon Value Perception	1-2 Hours	21	142,19	4,126	3	,248
	3-4 Hours	90	136,73			
	5-6 Hours	78	155,22			
	More than 6 hours	111	159,91			
	Total	300				
Discount Tendency	1-2 Hours	21	140,00	3,982	3	,263
	3-4 Hours	90	144,10			
	5-6 Hours	78	166,94			
	More than 6 hours	111	146,12			
	Total	300				
Attitudes towards Research on the Internet	1-2 Hours	21	126,07	39,248	3	,000
	3-4 Hours	90	112,97			
	5-6 Hours	78	192,70			
	More than 6 hours	111	155,90			
	Total	300				
Perceived Risk	1-2 Hours	21	124,29	15,471	3	,001
	3-4 Hours	90	173,65			
	5-6 Hours	78	159,60			
	More than 6 hours	111	130,30			
	Total	300				

Table 7 discusses whether there is a significant difference between the findings regarding daily internet usage and perceptions of the participants regarding digital discount coupons. According to the analysis, there is no statistically significant difference in the sub-dimensions of Perceived Values, Coupon Search, Frequency of Consumption, Discount Coupon Value Perception, and Discount Tendency, whereas there is significant difference in the sub-dimensions of Digital Coupon Proneness, Innovativeness, Coupon Proneness, Attitudes towards Research on the Internet, and Perceived Risk sub-dimensions.

e.) Findings on the Differences between the Scores of the Sub-Dimensions of Opinions and Attitudes towards Digital Discount Coupons Based on the Participants' 30-Day Shopping Expenditures

*H0: There is no difference between the score levels of the sub-dimensions according to the 30-day average shopping expenditures.*

*H1: There is difference between the score levels of at least one group's perception according to the 30-day average shopping expenditures.*

**Table 8. Kruskal Wallis Test Results of the Differences in Scores According to the 30-Day Shopping Expenditures of the Participants**

Sub Dimension	Shopping Expenditures	N	Mean Rank	Chi-Square	df	p
Digital Coupon Proneness	0-500 TL	180	131,98	29,653	3	,000
	501-1000 TL	57	154,33			
	1001-3000 TL	39	193,08			

	3001 TL or more	24	211,13			
	Total	300				
Perceived Values	0-500 TL	180	139,43	8,573	3	<b>,036</b>
	501-1000 TL	57	175,76			
	1001-3000 TL	39	161,92			
	3001 TL or more	24	155,00			
	Total	300				
Coupon Search	0-500 TL	180	135,66	16,108	3	<b>,001</b>
	501-1000 TL	57	163,61			
	1001-3000 TL	39	191,92			
	3001 TL or more	24	163,31			
	Total	300				
Frequency of Consumption	0-500 TL	180	121,38	58,104	3	<b>,000</b>
	501-1000 TL	57	177,68			
	1001-3000 TL	39	224,19			
	3001 TL or more	24	184,63			
	Total	300				
Innovativeness	0-500 TL	180	128,18	33,592	3	<b>,000</b>
	501-1000 TL	57	195,21			
	1001-3000 TL	39	162,77			
	3001 TL or more	24	191,75			
	Total	300				
Coupon Proneness	0-500 TL	180	135,23	16,213	3	<b>,001</b>
	501-1000 TL	57	163,05			
	1001-3000 TL	39	186,27			
	3001 TL or more	24	177,13			
	Total	300				
Discount Coupon Value Perception	0-500 TL	180	137,31	23,751	3	<b>,000</b>
	501-1000 TL	57	144,11			
	1001-3000 TL	39	208,12			
	3001 TL or more	24	171,00			
	Total	300				
Discount Tendency	0-500 TL	180	144,95	9,527	3	<b>,023</b>
	501-1000 TL	57	136,21			
	1001-3000 TL	39	181,54			
	3001 TL or more	24	175,63			
	Total	300				
Attitudes towards Research on the Internet	0-500 TL	180	139,25	8,344	3	<b>,039</b>
	501-1000 TL	57	162,89			
	1001-3000 TL	39	168,81			
	3001 TL or more	24	175,69			
	Total	300				
Perceived Risk	0-500 TL	180	156,93	6,025	3	<b>,110</b>
	501-1000 TL	57	154,42			
	1001-3000 TL	39	120,92			
	3001 TL or more	24	141,06			
	Total	300				

Table 8 indicates the sub-dimension score differences of the participants' attitudes and views towards digital discount coupons, according to monthly average shopping expenditures. It was determined that there was no significant difference in the Perceived Risk sub-dimension. Nonetheless, in all other dimensions, the perception of coupons differs according to the amount of monthly spending, and this difference arises from the group that makes purchases of 3001 TL or higher.

f.) Findings on the Differences between the Scores of the Sub-Dimensions of Opinions and Attitudes towards Digital Discount Coupons Based on the Average Monthly Income of the Participants

*H0: The score levels of the sub-dimensions differ according to the participants' monthly average income.*

*H1: There is difference between the score levels of at least one group's perception according to the participants' monthly average income. .*

**Table 9. Kruskal Wallis Test Results of the Differences between the Scores of the Participants according to their Average Monthly Income**

Sub Dimension	Monthly Income	N	Mean Rank	Chi-Square	df	p
Digital Coupon Proneness	3500 or less	129	153,12	1,754	2	,416
	3501-5000	36	132,61			
	5001 or more	135	152,77			
	Total	300				
Perceived Values	3500 or less	129	162,43	6,817	2	<b>,033</b>
	3501-5000	36	121,25			
	5001 or more	135	146,90			
	Total	300				
Coupon Search	3500 or less	129	146,41	5,395	2	,067
	3501-5000	36	125,29			
	5001 or more	135	161,13			
	Total	300				
Frequency of Consumption	3500 or less	129	129,22	17,254	2	<b>,000</b>
	3501-5000	36	142,42			
	5001 or more	135	172,99			
	Total	300				
Innovativeness	3500 or less	129	143,93	1,607	2	,448
	3501-5000	36	148,50			
	5001 or more	135	157,31			
	Total	300				
Coupon Proneness	3500 or less	129	149,03	3,378	2	,185
	3501-5000	36	128,63			
	5001 or more	135	157,73			
	Total	300				
Discount Coupon Value Perception	3500 or less	129	154,28	2,621	2	,270
	3501-5000	36	128,99			
	5001 or more	135	152,62			
	Total	300				
Discount Tendency	3500 or less	129	148,83	2,216	2	,330
	3501-5000	36	133,25			
	5001 or more	135	156,70			
	Total	300				
Attitudes towards Research on the Internet	3500 or less	129	141,28	2,867	2	,238
	3501-5000	36	162,83			
	5001 or more	135	156,02			
	Total	300				
Perceived Risk	3500 or less	129	156,24	2,382	2	,304
	3501-5000	36	131,25			
	5001 or more	135	150,14			
	Total	300				

Table 9 presents the findings regarding the difference between the sub-dimensions of the participants according to their monthly average income levels. Accordingly, it was determined that the Perceived Values and Frequency of Consumption dimensions differ by the participants' monthly income levels, while there is no difference in other dimensions. Thus, the monthly income level affects Frequency of Consumption and Perceived Values.

g) Findings on the Differences in Scores of the Sub-Dimensions of Opinions and Attitudes towards Digital Discount Coupons Based on the Participants' Social Media Preferences

*H0: The score levels of the sub-dimensions do not differ according to the social media preferences.*

*H1: The score levels of the sub-dimensions of at least one group differ according to the social media preferences.*

**Table 10. Kruskal Wallis Test Results of Differences in Scores Based on the Participants' Social Media Preferences**

Sub Dimension	Social Media	N	Mean Rank	Chi-Square	df	p
Digital Coupon Proneness	Facebook	18	138,72	18,664	3	<b>0,000</b>
	Twitter	39	163,95			
	Instagram	204	159,31			
	Others	39	96,42			
	Total	300				
Perceived Values	Facebook	18	159,50	22,500	3	<b>0,000</b>
	Twitter	39	175,88			
	Instagram	204	156,10			
	Others	39	91,65			
	Total	300				
Coupon Search	Facebook	18	171,17	13,961	3	<b>0,003</b>
	Twitter	39	193,40			
	Instagram	204	144,53			
	Others	39	129,31			
	Total	300				
Frequency of Consumption	Facebook	18	158,00	32,939	3	<b>0,000</b>
	Twitter	39	219,23			
	Instagram	204	143,65			
	Others	39	114,15			
	Total	300				
Innovativeness	Facebook	18	109,92	28,908	3	<b>0,000</b>
	Twitter	39	204,50			
	Instagram	204	151,95			
	Others	39	107,65			
	Total	300				
Coupon proneness	Facebook	18	160,25	15,284	3	<b>0,002</b>
	Twitter	39	177,85			
	Instagram	204	153,01			
	Others	39	105,50			
	Total	300				
Discount Coupon Value Perception	Facebook	18	128,72	17,159	3	<b>0,001</b>
	Twitter	39	158,77			
	Instagram	204	160,25			
	Others	39	101,27			
	Total	300				
Discount Tendency	Facebook	18	130,25	21,350	3	<b>0,000</b>
	Twitter	39	177,50			
	Instagram	204	157,34			
	Others	39	97,08			
	Total	300				

	Total	300				
Attitudes towards Research on the Internet	Facebook	18	139,25	12,852	3	<b>0,005</b>
	Twitter	39	195,73			
	Instagram	204	144,31			
	Others	39	142,86			
	Total	300				
Perceived Risk	Facebook	18	149,42	8,003	3	<b>0,046</b>
	Twitter	39	129,31			
	Instagram	204	148,46			
	Others	39	182,85			
	Total	300				

As indicated in the table, there is a significant association ( $p < .05$ ) between the social media preferences of the participants and their attitudes towards digital discount coupons in all dimensions. It may be inferred that the high association level especially in Instagram users is a result of the marketing activities of the platform's entrepreneurs and businesses which enable fast access to discount coupons widely utilized in popular e-stores.

## 5. DISCUSSION

Diverging from the other studies in the literature, this research focuses on the attitudes and perceptions of customers towards digital discount coupons rather than digital coupon redemption. Although digital coupon redemption is related to customer attitudes and perceptions, it can also be associated with different consumption periods, marketing and advertising activities or technical features of coupons and e-stores. However, customers' perceptions and attitudes towards digital discount coupons play a crucial role in interpretation of the impact of the coupons, regardless of whether are deemed or not. The identification of the determinants structuring the role and impact will not only facilitate the analysis of customer behavior, but will also guide the marketing activities in this field.

In this study, the attitudes towards digital discount coupons were examined under 10 different dimensions and it was questioned how these dimensions were affected by various variables. The dimensions were categorized as Digital Coupon Proneness, Perceived Values, Coupon Search, Frequency of Consumption, Innovativeness, Coupon Proneness, Discount Coupon Value Perception, Discount Tendency, Attitudes towards Research on the Internet, and Perceived Risk. Coupons, which have been efficiently utilized for years as a part of marketing activities, have also turned into an important promotional and marketing tool in online shopping. However, this time, they had to acquire some different features to adjust to the internet shopping environment and the platforms where coupons were offered, apart from traditional marketing methods. The dimensions discussed in the study are designed to reveal the role of digital discount coupons in these relatively new platforms and environments, as well as the customer response.

It has been revealed that gender differences play a significant role in attitudes towards digital coupons. Female consumers demonstrate significantly different attitudes in terms of value perception and digital coupon search. Previous research revealed that female consumers were more likely to use coupons (Harmon and Hills, 2003). Gender plays a crucial role in the scope of online shopping attitude based on different components such as cognition, effect, and behavior (Hasan, 2010: 600). Furthermore, it was reported that the impact of the benefits perceived in the intention to purchase online is moderated by gender (Chen et al., 2016). When the findings in this study are combined with the findings in the literature, it can be deduced that female consumers are more interested in searching for and redeeming digital coupons.

The results demonstrate a significant difference in terms of doing research on the Internet, Perceived Risk, and Frequency of Consumption based on age groups. One of the crucial factors influencing the use of information and communication technology is age

(Kubiatko, 2013: 1263). Within this framework, it is challenging to separate the attitudes towards digital coupons from the attitudes towards online shopping and Internet use in general. Thus, this research focuses on digital coupons that combine these two elements; coupons and online shopping, and emphasizes that this is a hybrid concept. It is suggested that the reluctance of the group over the age of 35 to shop online also affects their attitudes towards digital coupons.

Findings on the association of education level with consumers' attitudes and behaviors towards digital coupons are consistent with the existing literature. The role of education level on Internet competency has been determined in numerous studies (Thananuraksakul, 2007; Cheawkamolpat, 2009). However, since the attitude towards coupons is generally limited to coupon redemption and loyalty in the literature, the reflection of the role of education level on attitude has been discussed in a limited way. Previous studies demonstrated that there was a positive correlation between education and coupon redemption and suggested that the coupon redeemers are “better shoppers” (Levedahl, 1988: 280). In this research, education level impacted consumers' attitudes and behaviors toward digital coupons in two sub-dimensions. Coupon Proneness and Perceived Values sub-dimensions, which determine the intention to search, obtain, and redeem digital coupons demonstrate a significant difference as the education level increases.

The study's findings indicate that demographic segmentation is associated with the majority of the determinants, which provides insight into how digital discount coupons will be designed and presented before they are used, as well as who they will target under what conditions. Online sellers expand their customer bases or promote new products and services, especially in emerging markets, by using discount coupons as an instrument. Attitudes toward online shopping are associated with online purchasing behavior. Digital coupons' impact on online purchasing behavior should be considered from a holistic perspective. As a result, besides completing the purchase using coupons, other advantages that coupons create for sellers should not be overlooked. Taking their promotional and advertising value into consideration and not limiting the efficiency of discount coupons to redemption, future research can be conducted to monitor the impact of their instrumental role and changes in attitude towards them.

The fact that the research was conducted during the Covid-19 pandemic, when internet shopping became popular for many different age and income groups and became almost an obligation in many ways, may have created various changes in customer perceptions. However, it should be taken into account that these perception differences will be permanent as Internet shopping becomes an indispensable part of many people's lives in the post-Covid-19 period. The Covid-19 era has created a new internet shopper. It should be noted that this new internet shopper will want to pursue the traditional shopping approach to digital and to continue the convenience and bargaining comfort of traditional shopping with advantages such as digital coupons. Although it is one of the limitations of this study to be carried out during the Covid-19 period, it should be highlighted that it will be an important step in revealing this transformation in customers.

## REFERENCES

- Ahmed, K. A. & Sarwar, Z. (2018). Consumer Willingness to Use Digital Coupons: A Case of Karachi Market in Pakistan. *International Journal of Experiential Learning & Case Studies* 3 (1), 33-42.
- Bhatia, P. (2017). *Fundamentals of Digital Marketing*. Bengaluru: Pearson India.
- Cheawkamolpat, P. (2009). Online Shopping Behavior. *AU Journal of Management*, 7(2), 1-11.
- Chaffey, D. & Smith, P. R. (2008). *E-Marketing Excellence Planning and Optimizing Your Digital Marketing*. London: Routledge.
- Chen, J., T., L., Yu, Y., & Yu, X. (2016). The Effect of Online Information Sources on Purchase Intentions between Consumers with High and Low Susceptibility to Informational Influence. *Journal of Business Research*, 69(2), 467-475.
- Danaher, P. J., Smith, M.S, Ranasinghe, K. & Danaher, T.S. (2015). Where, When, and How Long: Factors that Influence the Redemption of Mobile Phone Coupons." *Journal of Marketing Research*, 52 (2), 710-725.
- Dias, G. P., Gomes, H., Gonçalves, J., Magueta, D., Marques, F., Martins, C., Rodrigues, M. & Araújo, J. (2015). "Discount Coupons Dematerialization: A Comprehensive Literature Review." In 7th International Conference on Information Process and Knowledge Management, 92-98.
- Dickinger, A., & Kleijnen, M. (2008). Coupons Going Wireless: Determinants of Consumer Intentions to Redeem Mobile Coupons. *Journal of Interactive Marketing*, 22(3), 23-39.
- Gao, H., Zhao, H., Tan, Y., Lin, Y. & Wei, L. (2020). Social promotion: A Creative Promotional Framework on Consumers' Social Network Value. *Production and Operations Management*, 29 (12), 2661-2678.
- Guilbeault, D. (2018). Digital Marketing in the Disinformation Age. *Journal of International Affairs*, 71 (1) 33-42.
- Hasan, B. (2010). Exploring Gender Differences in Online Shopping Attitude. *Computers in Human Behavior*, 26(4), 597-601.
- Harmon, S. K., & Hill, C. J. (2003). Gender and Coupon Use. *Journal of Product & Brand Management*, 48 (3/4), 699-721.
- Kubiato, M. (2013). The Comparison of Different Age Groups on the Attitudes toward and the Use of ICT. *Educational Sciences: Theory and Practice*, 13(2), 1263-1272.
- Kroger Launches Digital Coupon Center. (2010). <https://progressivegrocer.com/kroger-launches-digital-coupon-center> (Retrieved on July 05, 2021).
- Levedahl, J. W. (1988). Coupon Redeemers: Are They Better Shoppers?. *Journal of Consumer Affairs*, 22(2), 264-283.
- Nayal, P., & Pandey, N. (2020). Digital Coupon Redemption: Conceptualization, Scale Development and Validation. *Australasian Journal of Information Systems*, 2020, 24.
- NCH Report. (2018). <https://www.nchmarketing.com/2018-Year-End-Coupon-Facts-At-AGlance>. (Retrieved on July 07, 2021).
- Pandey, N. (2021). Digital Marketing Strategies for Firms in Post Covid-19 Era: Insights and Future Directions." In *The New Normal Challenges of Managerial Business, Social and Ecological Systems in the Post Covid-19 Era*. Bloomsbury Prime, 107-124.
- Ryan, D. & Jones, C. (2009). *Understanding Digital Marketing: Marketing Strategies for Engaging the Digital Generation*. New York: Kogan Page Publishers.
- Thananuraksakul, S. (2007). Factors Influencing Online Shopping Behavior Intention: A Study of Thai Consumers. *AU Journal of Management*, 5(1), 41-46.
- Turow, J. (2012). *The Daily You: How the New Advertising Industry Is Defining Your Identity and Your Worth*. London: Yale University Press.

- Xing, J, Zou, E., Yin, Z., Wang, Y. & Li, Z. (2020). Quick Response" Economic Stimulus: The Effect of Small-Value Digital Coupons on Spending. National Bureau of Economic Research, No. w27596.
- Uzunsakal, E. & Yıldız, D. (2018). Alan Arařtırmalarında Güvenilirlik Testlerinin Karşılaştırılması Ve Tarımsal Veriler Üzerine Bir Uygulama. Uygulamalı Sosyal Bilimler Dergisi, 2 (1), 14-28.
- Wang, W. T., Wang, Y. S., & Liu, E. R. (2016). The Stickiness Intention of Group-Buying Websites: The Integration of the Commitment-Trust Theory and E-Commerce Success Model, *Information and Management*, (53): 625-642.
- Yasav, S. (2015). The Impact of Digital technology on Consumer Purchase Behavior. *Journal of Financial Perspectives*, 3(3), 1-14.
- Zahay, D. (2020). *Digital Marketing Management: A Handbook for the Current (or Future) CEO*. USA: Business Expert Press.