

## The mediating effect of attitude towards online advertising in the influence of social media addiction on online purchase intention

Sosyal medya bağımlılığının çevrimiçi satın alma niyetine olan etkisinde, çevrimiçi reklama karşı tutumun aracılık etkisi

Rabia Genç<sup>1</sup> 问

Gülçin Bilgin Turna<sup>2</sup> 问

<sup>1</sup> Rize, Türkiye, <u>rabiakopz@gmail.com</u>

ORCID: 0000-0002-6030-4538

<sup>2</sup> Assist. Prof., Recep Tayyip Erdogan University, Rize, Türkiye, gulcin.turna@erdogan.edu.tr

ORCID: 0000-0003-1684-6548

#### **Corresponding Author:**

Gülçin Bilgin Turna,

Recep Tayyip Erdogan University, Rize, Türkiye, <u>gulcin.turna@erdogan.edu.tr</u>

Submitted: 24/03/2023 1st Revised: 16/04/2023 2nd Revised: 29/05/2023 3rd Revised: 13/06/2023 Accepted: 18/06/2023

Online Published: 26/06/2023

<u>Citation</u>: Genç, R., & Bilgin Turna, G., The mediating effect of attitude towards online advertising in the influence of social media addiction on online purchase intention, bmij (2023) 11 (2): 511-531, doi: https://doi.org/10.15295/bmij.v11i2.2228

#### Abstract

This study aims to investigate the relationship between consumers' social media addiction (SMA) levels and their online purchasing intentions (OPI) while examining the mediating role of attitudes towards online advertisements (ATOA) in this relationship. Additionally, the study aims to explore whether the demographic characteristics of consumers influence their levels of SMA, ATOA, and OPI. An online questionnaire consisting of the ATOA, SMA, OPI scales and demographic characteristics was shared with 402 participants using convenience sampling. Confirmatory factor analysis and structural equation modelling were applied to the data. T-tests, ANOVA, Levene, Tukey, and Tamhane T2 tests were used for difference analysis. According to the results, social media addiction positively affects the attitude towards online advertising and purchase intention. There is a partial mediating effect of the attitude towards online advertising in the effect of social media addiction on online purchase intention. Discriminant analysis results show that social media addiction is higher among single students between 18 and 25. While the attitude of young and single students towards online advertisements is more positive, the attitude towards online advertisements is more negative in consumers aged 36 and over compared to other consumers. Online purchase intention is higher in female consumers with a bachelor's degree or higher education level and lower in consumers over 36 years of age with a low-income level. Thus, it is recommended that practitioners focus on this target group in online advertising.

<u>Keywords</u>: Social Media Addiction, Attitude Towards Online Advertising, Online Purchase Intention, Mediation Effect, Structural Equation Model

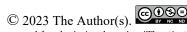
Jel Codes: M30, M31, M37, M39

## Öz

Bu çalışmanın amacı, tüketicilerin sosyal medya bağımlılık (SMA) düzeyleri ile çevrimiçi satın alma niyetleri (OPI) arasındaki ilişkiyi incelemek ve bu ilişkide çevrimiçi reklamlara yönelik tutumların (ATOA) aracı rolünü incelemektir. Ek olarak, çalışma, tüketicilerin demografik özelliklerinin sosyal medya bağımlılık düzeylerini, çevrimiçi reklamlara yönelik tutumlarını ve çevrimiçi satın alma niyetlerini etkileyip etkilemediğini araştırmayı amaçlamaktadır. ATOA, SMA, OPI ölçekleri ve demografik özelliklerden olusan online anket kolayda örnekleme yöntemi kullanılarak 402 katılımcı ile paylaşılmıştır. Verilere, doğrulayıcı faktör analizi ve yapısal eşitlik modeli uygulanmıştır. Fark analizlerinde, T testi, Anova, Levene, Tukey ve Tamhane T2 testleri kullanılmıştır. Elde edilen sonuçlara göre, sosyal medya bağımlılığı, hem çevrimiçi reklama karşı tutumu hem de çevrimiçi satın alma niyetini istatistiksel olarak anlamlı ve pozitif yönde etkilemektedir. Sosyal medya bağımlılığının çevrimiçi satın alma niyetini etkilemesinde, çevrimiçi reklama karşı tutumun kısmi aracılık etkisi bulunmaktadır. Fark analizleri sonucuna göre, sosyal medya bağımlılık düzeyinin 18-25 yaş arası, bekâr öğrencilerde daha yüksek olduğu görülmüştür. Ayrıca, genç ve bekâr öğrencilerin çevrimiçi reklamlara karşı tutumu daha olumlu iken, 36 yaş ve üzeri tüketicilerde çevrimiçi reklamlara karşı tutumun diğer tüketicilere kıyasla daha olumsuz olduğu görülmüştür. Çevrimiçi satın alma niyeti; lisans ve üstü eğitim seviyesine sahip kadın tüketicilerde daha yüksek, 36 yaş üzeri gelir seviyesi düşük olan tüketicilerde daha düşük olarak tespit edilmiştir. Bu nedenle, uygulayıcılara bu hedef grubun çevrimiçi reklamcılıkta odaklanmaları önerilebilir.

<u>Anahtar Kelimeler</u>: Sosyal Medya Bağımlılığı, Çevrimiçi Reklama Karşı Tutum, Çevrimiçi Satın Alma Niyeti, Aracılık Etkisi, Yapısal Eşitlik Modeli

JEL Kodları: M30, M31, M37, M39



This article was prepared in line with research and publication ethics and scanned for plagiarism by using iThenticate.

## Introduction

The intensive use of social media can negatively affect people, such as addiction (Çiftçi, 2018: 418). The rapid circulation of information can also cause inaccurate or manipulated information to be disseminated. Due to the rapid progress of technology, individuals spend a lot of time online. Therefore, it is no longer sufficient for businesses to use traditional marketing communication tools in the competitive environment. Companies need to develop new marketing strategies focusing on online marketing activities to influence the consumer decision process (Çağlıyan, Hassan, and Işıklar, 2016: 44). Internet users of all ages spend most of their time on social media (Barutçu and Tomaş, 2013: 7), which is a unique opportunity, especially for small-scale companies that want to carry out promotional activities at low cost. Advertising is used as a promotional activity on these platforms. It can reach millions of users thanks to social media (Akdeniz and Koçer, 2022: 53). The individual's attitude towards advertising generally transforms consumers' purchasing decisions (Karadağ and Ünal, 2022).

The increasing use of social media in recent years has brought social media addiction. The excessive use of social media, which is used as entertainment and leisure for people of all ages, is defined as social media addiction. People who are addicted to social media demonstrate a constant desire to be online, intensive use of social media tools, a focus on social networks even in social settings, avoidance of face-to-face communication, damage to daily life and social relations, feelings of restlessness and deprivation when not connected to the internet or staying away from social media, a desire to share every moment of life and all activities on social networks, and an urge to compare one's own life with those following on social media (İliş and Gülbahçe, 2019).

Although social media addiction has been widely investigated, its relationship with online purchasing intention and the mediating effect of attitude towards online advertising were ignored. "Attitude could be considered as people's global evaluations of any object, such as oneself, other people, possessions, issues, abstract concepts, and so forth" (Petty, Fabrigar, and Wegener, 2003). This study consists of two parts. The first part of the study examines the conceptual framework related to social media addiction, attitude towards online advertisements, and purchase intention. In the second part, the effect of social media addiction on online purchasing intention is investigated, and whether the attitude towards online advertisements has a mediating role in this effect is examined.

## **Conceptual framework**

## Social media addiction (SMA)

SMA has been defined as an "excessive desire" to use social media, worrying about social media sites, and isolating oneself from social activities, work, school, and family life (Demirci, 2019: 16). It causes people to feel uneasy when they cannot access social media due to limited phone use in traffic, at school, at work, or in a meeting (Çiftçi, 2018: 418). Griffiths (2005: 193-195) suggests that for a behaviour to be considered an addiction, it must contain certain components. These components include salience, mood change, tolerance, withdrawal, conflict, and relapse. Salience is when an activity becomes the most important activity in an individual's life, dominating their feelings, thoughts, and behaviours. Mood change refers to the personal experience individual reports from participating in an activity. Tolerance is the gradual increase in the size of the activity on which the individual is dependent. Withdrawal symptoms refer to unpleasant emotional states when an individual's addicted activity is cut off or reduced. Relapse refers to the tendency to return to previous levels of a given addictive activity repeatedly.

One of the main reasons for being addicted to social media is the desire to be rewarded. People often indulge in self-rewarding behaviours on social media platforms, such as watching videos, receiving likes, and spending time on these platforms, diverting their attention from daily concerns. However, there are disadvantages to using social media applications for a long time. It creates low self-esteem, leading to misperceptions that people's lives are better than yours. It increases the feeling of loneliness. It is effective in triggering mental disorders such as anxiety and depression. It plays an important role in the disruption of sleep patterns. Spending a long time on social media, especially before going to sleep at night, decreases performance in business life. It can cause a decrease in the ability to empathise and emotional fatigue. It creates a constant feeling of missing something (fear of missing out). This causes mental fatigue and stress (Hawi and Samaya, 2017).

## Attitude towards online advertising (ATOA)

Attitude is a long-term process related to motivation, emotion, perception, and cognitive environment and has three main components: cognitive, emotional, and behavioural. The cognitive component; consists of several indicators: attention, awareness, recognition, understanding and recall. The emotional component; relates to consumer feelings towards an attitude object. The behavioural component depends on the tendency to develop a behaviour related to the attitude object or the individual tendency (Kusumawati, 2017).

Advertising appears as a direct communication between the brand and the consumer. Although advertising has been used as a "communication" tool from the past to the present, it has now started to meet with consumers with online opportunities and two-way communication. Thus, advertisements now appear as a means of "interaction" (Açıkel and Çelikol, 2012: 23). Thanks to the measurability of online advertisements, it is possible to monitor the viewers of the advertisement, what they do after the advertisement, and even whether they have purchased by seeing the advertisement (Singh and Diamond, 2012: 20). However, while some of the consumers find personal advertisements useful, the majority see it as a violation of privacy.

Since online advertising reaches many people, it creates great potential for brands. Companies that allocate a large share of their budgets to online advertisements are interested in the attitude of consumers towards these advertisements (Akdeniz and Koçer, 2022: 50). Consumers' attitudes towards advertisements affect their purchasing behaviour (Karadağ and Ünal, 2022: 4). Çağlıyan et al. (2016) found a positive relationship between the purchasing behaviour of students and social media advertisements. In other words, as social media ads increase, purchasing behaviour also increases.

## Online purchase intention (OPI)

The concept of purchase intention reflects the predictable behaviour of consumers in their short-term future purchasing decisions. Purchase intention contributes significantly to the formation of attitudes. While the cognitive component reflects the knowledge and beliefs of individuals about a particular product or service, the emotional component emerges as a result of individuals' feelings towards a product or service. Finally, the behavioural component is the expression of the consumer's purchase intention (Fandos and Flavian, 2006).

Purchase intention is defined as the consumer's plan to purchase a certain amount of a product or brand (Çetin and Kumkale, 2016: 92). Online purchase intention, conversely, is defined as the consumer's willingness and involvement during online transactions. Factors such as trust in the site, ease of use, price, and perceived risk affect purchase intention. Perceived ease of use is the degree to which an individual believes that using a particular system will be effortless. It positively affects online purchase intention (Akel, 2015: 21-22). Trust is the expectation that individuals one trusts will not take advantage of the situation. It is the belief that the other party will act in a reliable, ethical, and socially appropriate manner (Gefen, Karahanna, and Straub, 2003: 54). Online shopping causes uncertainty due to the physical distance between the buyer and the seller. Thus, the risk factor arises (Kim, Xu, and Gupta, 2012). Since the payment process in online transactions usually takes place before the delivery of the product or service, there may be malicious use of financial information (Flavian and Guinaliu, 2006).

Price is a factor that has long been influential in consumers' decision-making process. Electronic media allows individuals to easily find the most suitable price by comparing prices between different sites (Kim et al., 2012). Perceived risk theory discusses many dimensions of risks, such as financial, temporal, performance, psychological, physical, and social risks. Therefore, an increase in perceived risk affects consumers' reluctance to shop. Online companies should understand the perception of risk and develop appropriate strategies to reduce the perception of risk in online shopping (Kim, Qu, and Kim., 2009: 204).

Models developed to understand traditional buying behaviour are also used to explain online purchasing behaviour. The variables such as attitude and social norms used in traditional purchasing behaviour models also affect online purchasing intention and behaviour (Hamidli, 2018: 14). These models are the causal motion theory, the planned behaviour theory, the technology acceptance model, the diffusion of innovation model, and the expectation validation model.

According to the causal motion theory, individuals follow a rational thinking process during the decision-making process. They are assumed to make decisions by calculating the possible effects of their decisions. If behaviour is positive for the individual and the environment supports it, purchase intention will be high. The planned behaviour theory, an expanded version of the causal motion theory, explains situations where the individual does not control behaviour. According to the planned behaviour theory, behavioural intention directly affects the individual's behaviour. The transformation of behavioural intention into behaviour depends entirely on the individual's opportunities and resources, such as time and money.

The technology acceptance model is similar to the causal motion and planned behaviour theories. In the technology acceptance model, attitude and behavioural intention affect behaviour, but this theory also examines external factors. Therefore, the variables of perceived usefulness and perceived ease of use are also included in the model. In the diffusion of innovation model, users consider ideas, objects, and practices new in a social system. The expectation confirmation model consciously judges whether the product meets the expectations of the individuals (Hamidli, 2018).

## Hypotheses development

Torun (2017) investigated the effects of consumers' social media and internet use on their purchasing behaviour. The study concluded that social networks significantly impact consumer purchasing behaviour, and consumers are influenced by the content created by companies at the point of purchase. Our first hypothesis aimed to measure the online purchasing intentions of addicted social media users as follows:

## H1: Consumers' level of social media addiction significantly and positively affects their online purchase intentions.

Özdemir, Özdemir, Polat, and Aksoy (2014) conducted a literature review to investigate the effectiveness of online advertising on social media and social networking sites. The study showed that online advertisements on social media are effective, and many companies have actively started using this new promotion tool. Our second hypothesis aimed to measure this effect:

# $H_2$ : Consumers' level of social media addiction significantly and positively affects their attitudes towards online advertising.

The objective of Akkaya's (2013) study was to investigate how consumers perceive, engage with, and intend to purchase in response to social media advertisements. The study found that users liked the advertisements on social media, exhibited a positive attitude, and partially agreed that they would buy the advertised product if needed and would visit the site to purchase it. Positive attitudes towards social media advertisements were found to affect purchase intentions positively. Manzoor, Baig, Hashim, and Sami (2020) investigated the effect of social media marketing and consumer trust on purchase intention, revealing that social media and customer trust significantly affect consumer purchase intentions. The study found that social media marketing has more influence on purchase intentions through social networking sites than customer trust.

The study by Aksoy and Gür (2018) investigated the effect of consumer perceptions of social media advertisements on purchase intention. The study concluded that social media advertisements positively affected consumer purchase intention by contributing to the economy of consumer perceptions and being fun and reliable. Gökdemir and Akıncı (2019) investigated consumer attitudes and privacy concerns towards online behavioural advertising. The study found that users exhibited positive and negative attitudes towards online behavioural advertising, developing a positive attitude towards the ads as they were suitable for users' interests, reminders, and informative. However, they exhibited negative attitudes due to feeling constantly exposed to and followed by the same advertisement.

Ethical problems on social media include privacy issues, copyright/patent rights, lack of security of personal data, exposure to heavy advertising, misleading labelling, and hidden advertisements. Karadağ and Ünal (2022) investigated the effect of consumer attitudes towards unethical online advertisements on purchase intention. The study concluded that ethical and moral values did not affect the evaluation of advertisements and consumer purchase intentions, and features such as entertaining and interesting advertisements influenced the consumer purchasing decision. Our third hypothesis aimed to investigate whether the consumer attitudes obtained as a result of the research would also be exhibited towards online advertisements in general and to measure online purchase intention:

# $H_3$ : Consumers' attitudes towards online advertisements significantly and positively affect their purchase intention.

In their study, Akdeniz and Koçer (2022) aimed to measure the attitude towards online video advertisements. The study investigated the factors affecting the attitude towards video advertisements published on the online video platform and the intention and behaviour of accepting the advertisement. The study concluded that informative, entertaining, and reliable messages in YouTube advertisements positively affect the attitude towards advertisements. In contrast, the attitude becomes negative as the disturbance feature of the advertisement increases. Celep and Çorumlu (2022) conducted a study to investigate the correlation between the extent of social media usage and the tendency towards compulsive online purchasing. The findings revealed a direct positive link between the intensity of social media usage and compulsive online buying behaviour. This outcome was attributed to the exposure to numerous advertisements encountered while using social media and the internet, which is

associated with the development of compulsive online purchasing behaviour. To assess the impact of individuals' attitudes towards online advertisements, our fourth hypothesis was formulated to explore the mediating role:

*H<sub>4</sub>*: There is a mediating role of consumers' attitudes towards online advertisements in the significant and positive effect of consumers' social media addiction levels on their online purchase intentions.

Above all, the aim was to test whether consumers' social media addiction levels, attitudes towards online advertising, and purchase intentions vary based on demographic characteristics. Therefore, the following hypotheses were formulated:

H<sub>5</sub>: SMA, ATOA and OPI levels of consumers vary according to demographic characteristics.

H<sub>5a</sub>: consumers' marital status varies according to their SMA, ATOA, and OPI levels.

H<sub>5b</sub>: Consumers' SMA, ATOA, and OPI levels vary according to their education level.

H<sub>5c</sub>: consumers' SMA, ATOA, and OPI levels vary according to occupation.

*H*<sub>5d</sub>: consumers' income levels vary according to their SMA, ATOA, and OPI levels.

## Method

This study examines the effect of consumers' social media addiction levels on their online purchasing intentions and the mediating role of their attitudes towards online advertisements in this effect. We also tested whether consumers' social media addiction levels, attitudes towards online advertisements, and purchase intentions vary based on demographic and descriptive characteristics. Figure 1 presents the research model for testing the hypotheses outlined above.

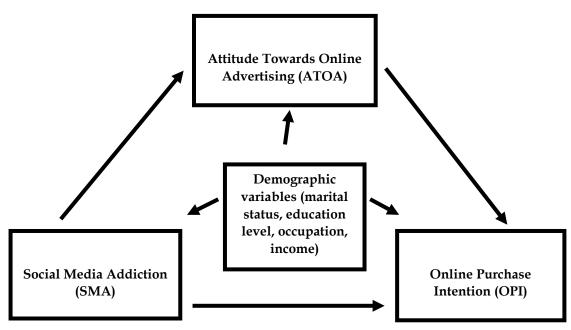


Figure 1: Research Model

An online questionnaire was distributed in December 2022 with 402 participants using convenience sampling. Confirmatory Factor Analysis (CFA) was used to examine the structural validity of the scale variables, and Cronbach's Alpha reliability analyses were conducted to determine their reliability levels.

The questionnaire consisted of four parts. The first part used the Bergen social media addiction scale, adapted into Turkish by Demirci (2019), after a validity and reliability analysis to measure social media addiction. The scale consisted of six items, and a 5-point Likert scale was used. The second part used the attitude scale towards online advertisements adapted by Sun and Wang (2010) to measure the level of attitude towards online advertisements. The scale consisted of items, and a 5-point Likert scale was used, with scale expressions ranging from 1-Strongly disagree to 5-Strongly agree. The third part used the online purchase intention scale, validated and reliable according to Saygılı (2014), to measure online purchase intention. The scale consisted of five items, and a 5-point Likert scale was used, with scale expressions ranging from 1-Strongly agree – the last part aimed to collect socio-demographic information.

Before conducting the confirmatory factor analysis, Z-score values of the variables were created to examine the data set for extreme values. No extreme values were found, as no observations with a z-score value exceeding 3.19 (Tabachnick and Fidell, 2013: 72-78). Confirmatory factor analysis (CFA) is a method used to test and supervise factor structures, either predetermined in original scales or put forward predictively, to control sources and to determine their structural validity properties. The model fit indices in Kline (2010) were used in the confirmatory factor analysis study. Finally, the reliability levels of the scale structures, which were determined to have structural validity properties in the CFA process, were checked through Cronbach's Alpha reliability analysis (Özdamar, 2016: 114-231).

## Findings

## Social media addiction scale structural validity and reliability

The confirmatory factor analysis, including the standardised path coefficients applied to the social media addiction scale, is presented in Figure 2.

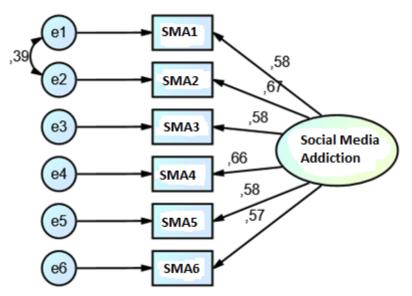


Figure 2: Social Media Addiction Scale CFA

The confirmatory factor analysis and Cronbach's Alpha reliability analysis results for the social media addiction scale are presented in Table 1.

Item		Scale	β	Std. β	S.E	Q.V.	Sig.	
SMA6			1.000	0.572	-	-	-	
SMA5			1.114	0.580	0.134	8.298*	0.000	
SMA4	l ←	Social Media	1.148	0.655	0.129	8.903*	0.000	
SMA3	Ì	Addiction Scale	1.049	0.581	0.126	8.301*	0.000	
SMA2	-		1.093	0.674	0.122	8.954*	0.000	
SMA1	-		0.957	0.577	0.119	8.064*	0.000	
Diagno	stic Statis	tics						
χ²(13)=10.8	<sup>2</sup> (13)=10.846 GFI=0.991		NFI=0.9	82	IFI=0.9	95	CFI=0.995	
Sig.=0.211	Sig.=0.211 AGFI=0.976		RFI=0.9	67	TLI=0.	991	RMSEA=0.030	
Cronbach's Alpha=0.786								

\*(%5) significance level, Std.β: Standardised path coefficient χ2: Chi-Square test statistic, Q.V: Critical value, S.E: Standard error

When examining Table 1, it is evident that all of the CFA model fit indices for the scale indicate a perfect fit (Bentler and Bonett, 1980; Hu and Bentler, 1999; Byrne, 2016; Hair, Hult, Ringle, and Sarstedt, 2017). Additionally, all path coefficients calculated for the items in the scale are significant at the 5% level. All of the statistically significant standardised values are above 0.5. Furthermore, Cronbach's Alpha reliability coefficient calculated for the scale indicates that it is highly reliable (Nunnally, 1978).

## Structural validity and reliability of the attitude scale towards online advertisement

The confirmatory factor analysis applied to the Attitude Towards Online Ads scale and the standardised path coefficients are presented in Figure 3.

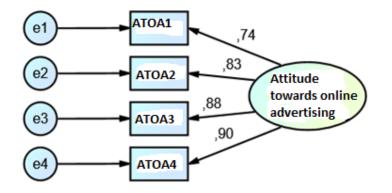


Figure 3: Attitude Towards Online Advertising Scale Confirmatory Factor Analysis

The findings of the confirmatory factor analysis applied to the Attitude Towards Online Advertising Scale, along with the standardised path coefficients, are presented in Figure 3. The results of the Cronbach's Alpha reliability analysis and the confirmatory factor analysis are shown in Table 2.

**Table 2:** Results of Structural Validity and Reliability Analysis of Attitudes Towards Online

 Advertisements Scale

Item		Scale	β	Std. β	S.E	Q.V	Sig.			
CRKT4			1.000	0.899	-	-	-			
CRKT3	÷	Attitude Towards Online Advertising	1.018	0.882	0.042	24.492***	0.000			
CRKT2			0.960	0.832	0.043	22.128***	0.000			
CRKT1			0.935	0.745	0.051	18.279***	0.000			
Diagnosti	Diagnostic Statistics									
χ²(02)=1.112	(02)=1.112 GFI=0.999		NFI=0.9	999	IFI=0.9	99	CFI=0.999			
Sig.=0.573	Sig.=0.573 AGFI=0.993		RFI=0.9	97	TLI=0.9	999	RMSEA=0.001			
Cronbach's Alpha=0.903										

\*(%5) significance level, Std.β: Standardised path coefficient χ2: Chi-Square test statistic, Q.V: Critical value, S.E: Standard error

Upon examining Table 2, it can be observed that all of the model fit indices indicate a perfect fit (Bentler and Bonett, 1980; Hu and Bentler, 1999; Byrne, 2016; Hair et al., 2017). Furthermore, all statistically significant standardised values are above 0.5. The calculated Cronbach's Alpha reliability coefficient for the scale shows excellent reliability (Nunnally, 1978).

## Structural validity and reliability findings of the online purchase intent scale

The confirmatory factor analysis applied to the Online Purchase Intention scale, and the standardised path coefficients are presented in Figure 4.

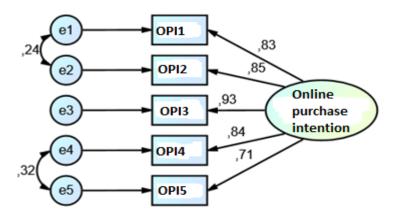


Figure 4: Online Purchase Intent Scale Confirmatory Factor Analysis

The findings of the Confirmatory Factor Analysis and Cronbach's Alpha reliability analysis for the Online Purchase Intention Scale are presented in Table 3.

Item		Scale	β	Std. β	S.E	Q.V	Sig.
OPI5			1.000	0.708	-	-	-
OPI4			1.177	0.844	0.062	19.102***	0.000
OPI3	÷	Online Purchase Intention	1.355	0.928	0.079	17.184***	0.000
OPI2			1.262	0.849	0.079	16.023***	0.000
OPI1			1.210	0.831	0.077	15.689***	0.000
Diagnost	ic Stati	istics					
χ²(03)=1.685		GFI=0.998	NFI=0.999		IFI=0.999		CFI=0.999
Sig.=0.640		AGFI=0.992	RFI=0.996		TLI=0.999	)	RMSEA=0.001

Table 3: Constructive Validity and Reliability Analysis Findings of Online Purchase Intention Scale

\*(%5) significance level, Std. $\beta$ : Standardised path coefficient  $\chi$ 2: Chi-Square test statistic, Q.V: Critical value, S.E: Standard error

When examining Table 3, it can be seen that all model fit indices indicate a perfect fit (Bentler and Bonett, 1980; Hu and Bentler, 1999; Byrne, 2016; Hair et al., 2017). All statistically significant standardised values are above 0.5. The Cronbach's Alpha reliability coefficient calculated for the scale indicates excellent reliability (Nunnally, 1978). Based on the findings of the Confirmatory Factor Analysis and Cronbach's Alpha Reliability Analysis applied to the scales, it can be said that all three scales are structurally valid, good, and highly reliable measurement tools without the need to exclude any item.

For data collection, the questionnaires were entered into Microsoft Excel and then transferred to IBM SPSS 22.0 after numerical coding was completed. Confirmatory Factor Analysis and Structural Equation Modelling were performed using IBM SPSS AMOS 25.0, and other analyses were carried out using the IBM SPSS 22.0 package program.

The data set was examined for missing and extreme values before conducting the scales' structural validity and reliability analyses. No missing values or extreme values were found. After the structural validity and reliability of the measurement tools were established, other analyses were performed. The demographic and descriptive findings of the sample included in the study are presented in Table 4.

Feature	Category	Frequency (n)	Per cent (%)	
	Female	251	62.4%	
Gender	Male	151	37.6%	
	Total	402	100.0%	
	Married	209	52.0%	
Marital status	Single	193	48.0%	
	Total	402	100.0%	
	18-25	131	32.6%	
	26-35	195	48.5%	
Age	36-45	63	15.7%	
	46+	13	3.2%	
	Total	402	100.0%	
	Primary	27	6.7%	
	High	146	36.3%	
	Undergraduate	85	21.1%	
Education level	Graduate	120	29.9%	
	Postgraduate	24	6.0%	
	Total	402	100.0%	
	Student	86	21.4%	
	Public Employee	53	13.2%	
	Private Sector Employee	118	29.4%	
Occupation	Academician	11	2.7%	
	Other	134	33.3%	
	Total	402	100.0%	
	5000 TL and under	29	7.2%	
	5001-10000 TL	188	46.8%	
<b>N</b> (11 - 1	10001-15000 TL	95	23.6%	
Monthly net income	15001-20000 TL	43	10.7%	
	20001 TL and over	47	11.7%	
	Total	402	100.0%	

Table 4: Demographic and Descriptive Findings

## Normal distribution statistics

For the measurement tools of the research, the descriptive statistics calculated for the total of the items divided by the number of items and the standardised values between 1 and 5 are as in Table 5.

**Table 5:** Variable Descriptive Statistics

Variable	Ν	Min.	Max.	Average	Standard deviation
Social Media Addiction	402	1.000	5.000	2.695	1.007
Attitude Towards Online Advertising	402	1.000	5.000	2.471	1.180
Online Purchase Intention	402	1.000	5.000	3.392	1.152

The social media addiction scale ranges from a minimum of 1 to a maximum of 5, with a standard deviation of 1.007 and an average of 2.695. The attitude towards online advertisements scale ranges from a minimum of 1 to a maximum of 5, with a standard deviation of 1.180 and a mean of 2.471. The online purchase intention scale ranges from a minimum of 1 to a maximum of 5, with a standard

deviation of 1.152 and an average of 3.392. The test statistics for the normal distribution calculated for the scale values are presented in Table 6.

Variable	Kolmogorov	ov-Smirnov Shapiro-Wi				
	W(402)	Sig.	D(402)	Sig.	s	К
Social Media Addiction	0.065*	0.000	0.975*	0.000	0.250	-0.662
Attitude Towards Online Advertising	0.113*	0.000	0.929*	0.000	0.385	-0.813
Online Purchase Intention	0.081*	0.000	0.946*	0.000	-0.410	-0.610

Table 6: Normal Distribution Test Statistics

\*(%5) significance level, W: Kolmogorov-Smirnov statistics, D: Shapiro-Wilk statistics, (brackets contain the test degrees of freedom) S: Skewness, K: Kurtosis

When examining Table 6, it can be observed that the variables do not follow a normal distribution according to the significance values of the normal distribution test statistics calculated for the three variables (Sig. < 0.10). However, it is a rare ideal situation to see normal distribution with normal distribution tests performed using data collected through scales for social sciences. In the literature, it is suggested that the skewness coefficients should be examined for such data, and it would be correct to assume that the assumption of the normal distribution is met if there is no significant skewness (Tabachnick and Fidell, 2013). When examining the variables in the study in terms of skewness coefficients, it was determined that the variables did not have significant skewness since all of them were less than 0.5 in absolute value (|S| < 0.5) (Hair, 2013). When the kurtosis coefficients of the variables were examined, negative kurtosis was observed for all three variables. Therefore, it was accepted that there was a near-normal distribution, and parametric analyses were adopted.

In cases of negative kurtosis, the bootstrap method is recommended for Structural Equation Model applications, and this method was used in estimating the Structural Equation Models. For difference analyses examining the differences in demographic and descriptive variables, it would be appropriate to use parametric test techniques that are more reliable under the same conditions (normal and near-normal distribution) where there is no significant skewness (Karagöz, 2016). Although H0 is correct, the probability of type 1 error, which can be defined as finding the H1 hypothesis correct as a result of the research, is higher in non-parametric hypothesis tests (Kalaycı, 2006: 85). The histogram graphs and Box Plot graphs of the variables were examined. It was determined that there were no extreme values.

		Social Media Addiction	Attitude Towards Online Advertising	Online Purchase Intention
Social Media Addiction	R <sub>XY</sub>	1.000		
	Sig.	-		
Attitude Towards Online	R <sub>XY</sub>	0.286*	1.000	
Advertising	Sig.	0.000	-	
Online Purchase Intention	R <sub>XY</sub>	0.347*	0.413*	1.000
	Sig.	0.000	0.000	

Table 7: Correlation Matrix between Variables

\*(%5) significance level

## Structural equation model (SEM)

This section tests the research hypotheses through Structural Equation Models and reports the findings using charts and tables. The structural equation model scheme established to analyse direct effects in the first research hypothesis is presented in Figure 5.

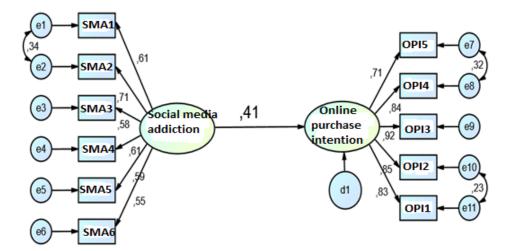


Figure 5: Structural Equation Model Chart for Direct Effect

## Table 8: Direct Effect Model Structural Equation Model Findings

Direct Effect Model										
Internal Variable		Extrinsic Varia	ble	β	Std	.β	S.E.		t	Sig.
Online Purchase Intention	÷	Social M Addiction	Media	0.470	0.41	13	0.079		5.991*	0.00
Model Fit Indices					•					
χ²(40)=66.805*	GFI=0.971 <sup>M</sup>	NFI	=0.971 <sup>M</sup>			IFI=0.	988 <sup>M</sup>		CFI=0.988 M	ĺ
Sig.=0.005	AGFI=0.952 <sup>M</sup>	RFI=	=0.960 <sup>M</sup>			TLI=0	.984 <sup>M</sup>	R	MSEA=0.041	М

\*(%5) significance level, Lower: 95% lower confidence limit, 95% G.A. Upper: 95% confidence cap, S.E: Standard error, Std  $\beta$ : Standardised path coefficient,  $\chi$ 2: Chi-Square Test statistic, (bracket test includes degrees of freedom). The M superscript indicates perfect fit, K superscript acceptable fit, N subscript indicates acceptable fit.

When examining Table 8, it is evident that all the fit indices of the structural equation model indicate a perfect fit. The coefficient, which represents the effect of social media addiction level on online purchase intention, is statistically significant and positive for a significance level of 5% (Std. $\beta$ =0.413, Sig.<0.05). Therefore, increasing consumers' social media addiction increases online purchase intention. Conversely, the decrease in consumers' social media addiction level causes a decrease in their online purchase intention. This finding also satisfies the first requirement of the Baron and Kenny (1986) method for mediation analysis. The mediation effect structural equation model scheme, which was created to examine the direct effects in the second and third hypotheses of the research and the mediation relationship in the fourth hypothesis, is presented in Figure 6.

Rabia Genç & Gülçin Bilgin Turna

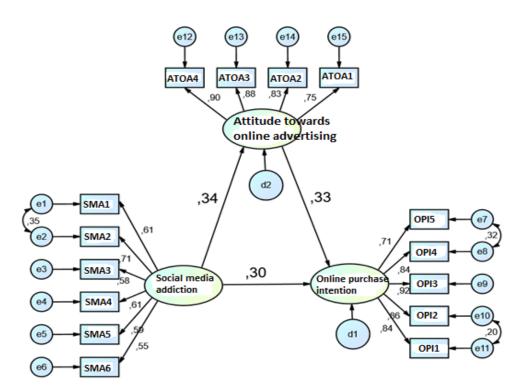


Figure 6: Structural Equation Model Chart for Indirect Effect

The mediator effect model and the results of the direct effect model repeated for comparison are in Table 9.

Internal Variable		Extrinsi	c Variable	β	Std	.β	S.E	t		Sig.
Online Purchase Intention	<i></i>	Social N	Iedia Addiction	0.470	0.41	3	0.079	79 5.991		0.000
Model Fit Indices				_						
χ²(40)=66.805***	GFI=0.9	71 <sup>M</sup>	NFI=0.971 M	=0.971 <sup>M</sup> IFI=0.988			CFI=0.988 M			
Sig.=0.005	AGFI=0	.952 <sup>M</sup>	RFI=0.960 M			TL	I=0.984 <sup>M</sup>		RMSI	EA=0.041 <sup>M</sup>
Mediator Effect Mode	el (Baron and	l Kenny)								
Internal Variables		Extrinsi	Extrinsic Variables		Std	.β	S.H	1	t	Sig.
Online Purchase Intention	÷	Social N	Iedia Addiction	0.347	0.30	4	0.073	4.727*		0.000
Online Purchase Intention	÷		e Towards Advertising	0.262	0.32	8	0.044	5.927*		0.000
Attitude Towards Online Advertising	÷	Social N	Iedia Addiction	0.486	0.340		0.092	5.278*		0.000
Indirect (Intermediate	e) Effect (Bo	otstrap)								
Social Media Addicti	on → Attitud	le Toward	s Online Advert	ising → Oı	nline P	urch	nase Intention			
Effect			95%	Lower			95% Top	95% Top		
0.112			0.068				0.158			
Model Fit Indices			I				1			
χ²(84)=109.932**	GFI=0.965	М	NFI	=0.968 <sup>M</sup>			IFI=0.992 <sup>M</sup>	CI	CFI=0.992 <sup>M</sup>	
Sig.=0.030	AGFI=0.94	10M	DEI	=0.992 <sup>M</sup>			TLI=0.990 <sup>M</sup>	RMSEA=0		0.028M

Table 9: Mediator Effect Model Structural Equation Model Findings

\*(%5) significance level, Lower: 95% lower confidence limit, 95% G.A. Upper: 95% confidence cap, S.E: Standard error, Std  $\beta$ : Standardised path coefficient,  $\chi$ 2: Chi-Square Test statistic, (bracket test includes degrees of freedom). The M superscript indicates perfect fit, K superscript acceptable fit, N subscript indicates acceptable fit.

Table 9 shows that the effect of social media addiction level on attitude towards online advertisements in research hypothesis 2 is statistically significant and positive at the 5% significance level (Std. $\beta$ =0.340,

Sig.<0.05). In other words, increasing consumers' social media addiction levels leads to a positive attitude towards online advertising. This finding satisfies the second condition of the Baron and Kenny (1986) method for mediation analysis.

When comparing the coefficients in the direct effect model with the mediating effect model for the same path in Table 9, the coefficient decreased from 0.413 to 0.304, and it was statistically significant in the mediating effect model (Std. $\beta$ =0.304, Sig.<0.05). Thus, according to the Baron and Kenny (1986) method, there is partial mediation of the attitude towards online advertisements in the effect of consumers' social media addiction levels on their online purchase intention.

When using the modern mediation Bootstrap method proposed by Hayes (2018), the indirect effect coefficient was calculated as 0.112, and the 95% confidence interval of the coefficient did not contain the zero value (95 CI Lower = 0.068, 95 CI Upper = 0.158). Therefore, according to the Bootstrap method, the attitude towards online advertisements has a mediating role in the effect of consumers' social media addiction levels on their online purchase intention.

Both approaches suggest that the effect of consumers' social media addiction levels on their online purchase intention is partially mediated by their attitude towards online advertisements. The Baron and Kenny (1986) method indicates partial mediation, while the modern mediation Bootstrap method suggests a medium level of mediation since the indirect effect coefficient is greater than 0.09 and less than 0.25.

## **Discriminant Analysis**

This part of the study aimed to test whether consumers' social media addiction levels, attitudes towards online advertising, and purchase intentions vary based on demographic characteristics. The Independent Sample T-Test findings examined the differences between male and female consumers, as in Table 10.

Variable	Gender	N	X	S.D	Levene	T-Test
Social media addiction	Female	251	2.734	1.031	F(1, 400)=2.086	t(400)=1.005
	Male	151	2.630	0.964	Sig.=0.149	Sig.=0.316
Attitude towards online	Female	251	2.497	1.182	F(1, 400)=0.006	t(400)=0.561
advertising	Male	151	2.429	1.180	Sig.=0.938	Sig.=0.575
Online purchase intention	Female	251	3.486	1.133	F(1, 400)=0.026	t(400)=2.118*
r	Male	151	3.236	1.170	Sig.=0.873	Sig.=0.035

Table 10: Independent Sample T-Test Findings Examining Differences by Gender

\*(%5) significance level,  $\overline{X}$ : Average, S.D: Standard deviation, F: Test statistics, t: T-Test statistics, (bracket test includes degrees of freedom), F(S.D.1, S.D.2), t(S.D.) The Levene Homogeneity Test selected T-test statistics.

In terms of social media addiction, there was no statistically significant difference between female  $(2.734\pm1.031)$  and male  $(2.63\pm0.964)$  consumers at the 5% significance level (t(400)=1.005, Sig.>0.05). Similarly, there was no statistically significant difference between female  $(2.497\pm1.182)$  and male  $(2.429\pm1.18)$  consumers in terms of attitudes towards online advertisements at the 5% significance level (t(400)=0.561, Sig.>0.05). However, a statistically significant difference was found between female  $(3.486\pm1.133)$  and male  $(3.236\pm1.17)$  consumers in terms of online purchase intention at the 5% significance level (t(400)=2.118, Sig.<0.05). Specifically, female consumers had a higher online purchase intention than male consumers. The findings of the Independent Sample T-Test, which examined the differences between single and married consumers, are presented in Table 11.

Table 11: Independent Sample T-Test Findings Examining Differences by Marital Status

Variable	Marital status	Ν	x	S.D	Levene	T-Test
Social media addiction	Married	209	2.575	0.988	F(1, 400)=0.278	t(400)=-2.510*
Social media addiction	Single	193	2.826	1.013	Sig.=0.598	Sig.=0.012
Attitude terrende enline e duesticine	Married	209	2.327	1.206	F(1, 400)=2.454	t(400)=-2.578*
Attitude towards online advertising	Single	193	2.628	1.135	Sig.=0.118	Sig.=0.010
Online analysis intention	Married	209	3.323	1.207	F(1, 400)=0.943	t(400)=-1.243
Online purchase intention	Single	193	3.466	1.088	Sig.=0.332	Sig.=0.215

\*(%5) significance level,  $\overline{X}$ : Average, S.D: Standard deviation, F: Test statistics, t: T-Test statistics, (bracket test includes degrees of freedom), F(S.D.1, S.D.2), t(S.D.) The Levene Homogeneity Test selected T-test statistics.

There is a statistically significant difference at the 5% significance level in terms of social media addiction between married ( $2.575\pm0.988$ ) and single ( $2.826\pm1.013$ ) consumers (t(400)=-2.510, Sig.<0.05). When the averages are examined, it is seen that the difference is in favour of single consumers. In other words, single consumers' social media addiction levels are higher than married consumers.

A statistically significant difference was also found between married  $(2.327\pm1.206)$  and single  $(2.628\pm1.135)$  consumers in terms of attitudes towards online advertisements at the 5% significance level (t(400)=-2.578, Sig.<0.05). When the averages are examined, it is seen that the difference is in favour of single consumers, meaning that single consumers have more positive attitudes towards online advertisements than married consumers.

There was no statistically significant difference between married  $(3.323\pm1.207)$  and single  $(3.466\pm1.088)$  consumers in terms of online purchase intention at the 5% significance level (t(400)=-1.243, Sig.>0.05). The findings of the ANOVA test conducted to examine the differences between consumers in different age groups are presented in Table 12.

Variable	Age	Ν	X	S.D	Levene		Anova	Post	
Social media addiction	1.)18- 25	131	2.987	0.998	F(2, 399)=3.414*		F(2, 399)=10.395*	1>2 and 3	
	2.)26- 35	195	2.626	0.921	Sig.=0.034		Sig.=0.000		
	3.)36+	1	76	2.371	1.108				
Attitude towards online advertising	1.)18-25		131	2.672	1.177	F(2, 399)=0.039		F(2, 399)=3.279*	1 and 2>3
	2.)26-35		195	2.417	1.174	Sig.=0.962		Sig.=0.039	
	3.)36+		76	2.266	1.168				
Online purchase	1.)18-25		131	3.568	1.034	F(2, 399)=6.160*		F(2, 399)=10.378*	
	2.)26-35		195	3.478	1.087	Sig.=0.002		Sig.=0.000	1 and 2>3
intention	3.)36+		76	2.868	1.357				

**Table 12:** Anova Test Findings Examining Differences by Age Groups

\*(%5) significance level,  $\overline{X}$ : Average, S.D: Standard deviation, F: Test statistics, t: T-Test statistics, (bracket test includes degrees of freedom), F(S.D.1, S.D.2), t(S.D.) The Levene Homogeneity Test selected T-test statistics. Tukey's for Homogeneous Variances and Tamhane's T2 Post Hoc tests for Heterogeneous Variances were used. Post Hoc Tests were unnecessary for the variables without significant differences in the Anova Test result.

During the test, the sub-sample between the ages of 36 and 45 (n=63) and the age group of 46 and above (n=13) were combined to ensure that all groups had more than 30 members (n>30). In terms of social media addiction, statistically significant differences were found at the 5% significance level among consumers aged between 18 and 25 (2.987±0.998), between the ages of 26 and 35 (2.626±0.921), and 36 years and over (2.371±1.108) (F(2, 399)=10.395, Sig.<0.05). The findings of Tamhane's T2 Post Hoc test, which was conducted to determine the group or groups that are the source of the difference, are as follows: the social media addiction levels of consumers between the ages of 18 and 25 are higher than those of all other consumers, but there is no statistically significant difference among the other age groups in this regard.

There was a statistically significant difference at the 5% significance level among consumers aged 18 to 25 (2.672 $\pm$ 1.177), 26 to 35 years old (2.417 $\pm$ 1.174), and 36 years and older (2.266 $\pm$ 1.168) in terms of attitudes towards online advertisements (F(2, 399)=3.279, Sig.<0.05). The findings of Tukey's Post Hoc test, which was conducted to determine the group or groups that are the source of the difference, are as follows: while the attitudes of consumers in the age group of 36 and above towards online advertisements are more negative than those of all other consumers, there is no statistically significant difference among the other age groups in this regard.

There was a statistically significant difference at the 5% significance level among consumers aged between 18 and 25 ( $3.568\pm1.034$ ), between 26 and 35 years ( $3.478\pm1.087$ ), and 36 years and over ( $2.868\pm1.357$ ) in terms of online purchase intention (F(2, 399)=10.378, Sig.<0.05). The findings of Tukey's Post Hoc test, which was conducted to determine the group or groups that are the source of the difference, are as follows: while the online purchasing intentions of consumers in the age group of 36 and above are lower than those of all other consumers, there is no statistically significant difference among the other age groups in this regard. The findings of the Anova Test, which examined the differences between consumers at different education levels, are presented in Table 13.

Variable	Education level	Ν	X	S.D	Levene	Anova	Post
	1.)High school and under	173	2.596	1.045	F(2, 399)=3.626**	F(2, 399)=1.495	
Social media addiction	2.)Undergraduate	85	2.751	0.896	Sig.=0.028	Sig.=0.226	-
	3.)Graduate and higher	144	2.781	1.017			1
Attitude towards	1.)High school and under	173	2.447	1.170	F(2, 399)=3.577**	F(2, 399)=1.417	
online advertising	2.)Undergraduate	85	2.324	1.238	Sig.=0.029	Sig.=0.244	-
	3.)Graduate and higher	144	2.589	1.154			
	1.)High school and under	173	3.264	1.217	F(2, 399)=3.571**	F(2, 399)=3.220**	
Online purchase intention	2.)Undergraduate	85	3.329	1.140	Sig.=0.029	Sig.=0.041	3>1
	3.)Graduate and higher	144	3.583	1.058			1

Table 13: Anova Test Findings Examining Differences by Education Level

\*(%5) significance level,  $\overline{X}$ : Average, S.D: Standard deviation, F: Test statistics, t: T-Test statistics, (bracket test includes degrees of freedom) F(S.D.1, S.D.2), F(S.D.1, S.D.2), t(S.D.) The Levene Homogeneity Test selected T-test statistics. Tukey's for homogeneous variances and Tamhane's T2 Post Hoc tests for heterogeneous variances were used. Post Hoc Tests were unnecessary for the variables without significant differences in the Anova Test result. Primary education (n=27) and undergraduate (146) groups and undergraduate (120) and postgraduate (24) groups were combined to ensure that all groups had more than 30 members (n>30).

In terms of social media addiction, there was no statistically significant difference at the 5% significance level among consumers with a high school education or lower (2.596±1.045), associate degree (2.751±0.896), or undergraduate and higher education (2.781±1.017) (F(2, 399)=1.495, Sig.>0.05). Similarly, there was no statistically significant difference at the 5% significance level among consumers with a high school education or lower (2.447±1.17), associate degree (2.324±1.238), or undergraduate and higher education (2.589±1.154) in terms of attitudes towards online advertisements (F(2, 399)=1.417, Sig.>0.05).

There was a statistically significant difference at the 5% significance level among consumers with a high school education or lower ( $3.264\pm1.217$ ), associate degree ( $3.329\pm1.14$ ), and undergraduate and higher education ( $3.583\pm1.058$ ) levels of online purchase intention (F(2, 399)=3.220, Sig.<0.05). The findings of Tamhane's T2 Post Hoc test, which was conducted to determine the group or groups that are the source of the difference, are as follows: While the online purchasing intentions of consumers with undergraduate and postgraduate education are higher than all other consumers, there is no statistically significant difference among other consumers in this regard. The findings of the Anova Test examined the differences between consumers with different occupations, as in Table 14.

Variable	Occupation	Ν	X	S.D	Levene	Anova	Post	
	1.)Student	86	3.118	1.006	F(3, 398)=0.881	F(3, 398)=7.515***		
Social media	2.)Public sector	53	2.579	1.057	1(0)000) 0.001	1(0,000) 7.010	1>2, 3 and 4	
addiction	3.)Private sector	118	2.682	1.013	Sig.=0.451	Sig.=0.000	1, 2, 0 and 4	
	4.)Other	145	2.498	0.914	51g. 0.401	51g. 0.000		
Attitude	1.)Student	86	2.721	1.160	F(3, 398)=0.844	F(3, 398)=3.995***	1>2	
towards	2.)Public sector	53	2.170	1.190		1(0,000) 00000		
online advertising	3.)Private sector	118	2.619	1.236	Sig.=0.470	Sig.=0.008		
0	4.)Other	145	2.314	1.104	016. 0.110	51 <u>5</u> . 0.000		
Online purchase intention	1.)Student	86	3.581	0.950	F(3, 398)=2.839*	F(3, 398)=1.180		
	2.)Public sector	53	3.343	1.258	1(0)000) 2.000	1(0,000) 1.100	_	
	3.)Private sector	118	3.400	1.179	Sig.=0.038	Sig.=0.317	1	
	4.)Other	145	3.291	1.196	0.5. 0.000			

Table 14: Anova Test Findings Examining Differences by Occupation

\*(%5) significance level,  $\overline{X}$ : Average, S.D: Standard deviation, F: Test statistics, t: T-Test statistics, (bracket test includes degrees of freedom) F(S.D.1, S.D.2), F(S.D.1, S.D.2), t(S.D.) The Levene Homogeneity Test selected T-test statistics. Tukey's for homogeneous variances and Tamhane's T2 Post Hoc tests for heterogeneous variances were used. Post Hoc Tests were unnecessary for the variables without significant differences in the Anova Test result. Academician (n=11) and Other (134) groups were combined to ensure that all groups had more than 30 members (n>30).

In terms of social media addiction, statistically significant differences were found between students (3.118±1.006), public employees (2.579±1.057), private sector employees (2.682±1.013), and other

professionals (2.498±0.914) at the 5% significance level (F(3, 398)=7.515, Sig.<0.05). The findings of Tukey's Post Hoc test, which was conducted to determine the group or groups that are the source of the difference, are as follows: while students' social media addiction levels are higher than all other groups, there is no statistically significant difference among the other groups. Statistically significant differences were found at the 5% significance level between students (2.721±1.16), public employees (2.17±1.19), private sector employees (2.619±1.236), and other professionals (2.314±1.104) in terms of attitudes towards online advertisements (F(3, 398)=3.995, Sig.<0.05). The findings of Tukey's Post Hoc test, which was conducted to determine the group or groups that are the source of the difference, are as follows: while students' attitudes towards online advertisements are higher than those of public employees, there is no statistically significant difference among the other groups. There is no statistically significant difference among the other groups. There is no statistically significant difference among the other groups. There is no statistically significant difference at the 5% significance level in terms of online purchase intention between students (3.581±0.95), public employees (3.343±1.258), private sector employees (3.400±1.179), and other professionals (3.291±1.196) (F(3, 398)=1.180, Sig.>0.05). The findings of the Anova Test conducted to examine the differences among consumers with different income levels are presented in Table 15.

Variable	Monthly income	Ν	X	S.D	Levene	Anova	Post
	1.)10,000 TL and under	217	2.59	1.03	F(3, 398)=1.812 F(3, 398)=3.240**		4>1
Social media	2.)10,001-15,000 TL	95	2.67	0.88			
addiction	3.)15,0001-20,000 TL	43	2.80	1.09	Sig.=0.144	Sig.=0.022	<b>T</b> 2 1
	4.)20,001 TL and over	47	3.08	0.94	5. 0.144		
	1.)10,000 TL and under	217	2.36	1.18	F(3, 398)=1.772	F(3, 398)=1.955	-
Attitude towards	2.)10,001-15,000 TL	95	2.62	1.22	1(3, 398)-1.772	1(5,556) 1.555	
online advertising	3.)15,0001-20,000 TL	43	2.38	1.20	Sig.=0.152	Sig.=0.120	
	4.)20,001 TL and over	47	2.72	1.00	51g0.152		
	1.)10,000 TL and under	217	3.18	1.21	F(3, 398)=1.604 F(3, 398)=5.904*		4, 3 and 2>1
Online purchase	2.)10,001-15,000 TL	95	3.59	1.01			
intention	3.)15,0001-20,000 TL	43	3.58	0.99	Sig.=0.188	Sig.=0.001	+, 5 and 2~1
	4.)20,001 TL and over	47	3.79	1.08			

Table 15: Anova Test Fi	ndings Exan	nining Difference	es by Income Level
-------------------------	-------------	-------------------	--------------------

\*(%5) significance level,  $\overline{X}$ : Average, S.D: Standard deviation, F: Test statistics, t: T-Test statistics, (bracket test includes degrees of freedom) F(S.D.1, S.D.2), F(S.D.1, S.D.2), t(S.D.) The Levene Homogeneity Test selected T-test statistics. Tukey's for homogeneous variances and Tamhane's T2 Post Hoc tests for heterogeneous variances were used. Post Hoc Tests were unnecessary for the variables without significant differences in the Anova Test result. By combining less than 5000 TL (n=29) and 5001 10000 TL (n=188), it was ensured that all groups had more than 30 members (n>30).

In terms of social media addiction, statistically significant differences were found among consumers with an income of 10,000 TL or less  $(2.599 \pm 1.035)$ , 10,001 to 15,000 TL  $(2.674 \pm 0.888)$ , 15,001 to 20,000 TL  $(2.802 \pm 1.091)$ , and 20,001 TL and above  $(3.085 \pm 0.944)$  at the 5% significance level (F(3, 398) = 3.240, Sig. < 0.05). The findings of Tukey's Post Hoc test, which was conducted to determine the group or groups that are the source of the difference, are as follows: While the social media addiction level of consumers with an income of 20,001 TL and above is higher than those with an income of less than 10,000 TL, there is no statistically significant difference between other consumers in this regard.

In terms of attitude towards online advertisements, statistically significant differences were found among consumers with an income of 10,000 TL or less (2.366 ± 1.183), between 10,001 and 15,000 TL (2.629 ± 1.227), between 15,001 and 20,000 TL (2.378 ± 1.202), and 20,001 TL and above (2.723 ± 1.003) at the 5% significance level (F(3, 398) = 1.955, Sig. > 0.05).

Regarding online purchase intention, statistically significant differences were found among consumers with an income of 10,000 TL or less ( $3.18 \pm 1.214$ ), 10,001 to 15,000 TL ( $3.594 \pm 1.01$ ), 15,001 to 20,000 TL ( $3.581 \pm 0.995$ ), and 20,001 TL and above ( $3.791 \pm 1.082$ ) at the 5% significance level (F(3, 398) = 5.904, Sig. < 0.05). The findings of Tukey's Post Hoc test, which was conducted to determine the group or groups that are the source of the difference, are as follows: The online purchasing intentions of consumers with an income of less than TL 10,000 are lower than all others consumers, and there is no statistically significant difference among other consumers in this regard.

## Conclusion

Social media provides a platform for various interactive activities such as making friends, entertainment, and shopping for its users. Social media is also utilised for sharing information, news,

communication, and education (Baz, 2018: 278). However, the extensive use of social media presents social media addiction as a problem (Demirci, 2019: 15). Social media addiction refers to individuals' dependence on or excessive use of social media platforms. Higher levels of social media addiction indicate a stronger attachment or reliance on social media. Online purchase intention refers to the likelihood or inclination of consumers to make online purchases. It represents their willingness or motivation to engage in online shopping activities. Attitude towards online advertisements refers to consumers' beliefs, evaluations, or perceptions about online advertisements. It reflects their favourable or unfavourable opinions towards online ads. The statement "The effect of consumers' social media addiction levels on their online purchase intention is partially mediated by their attitude towards online advertisements" implies a relationship between consumers' social media addiction levels and their online purchase intention. Besides, this relationship is influenced by the mediating variable, their attitude towards online advertisements. In other words, the effect of social media addiction on online purchase intention is influenced or channelled through consumers' attitudes towards online advertisements. This implies that consumers' attitudes towards online advertisements play a role in explaining why social media addiction influences their online purchase intention. It suggests that consumers' positive or negative attitudes towards online ads, which their social media addiction may influence, affect their likelihood of making online purchases. Therefore, to fully understand the relationship between social media addiction and online purchase intention, it is important to consider the mediating role of attitudes towards online advertisements. This mediation suggests that attitudes towards online advertisements serve as an intermediate factor that helps explain how social media addiction influences consumers' online purchase intention.

According to the results of this study, while the social media addiction levels of consumers between the ages of 18 and 25 are higher than all other consumers, there is no statistically significant difference among other consumers. Moreover, while students' social media addiction levels are higher than all other consumers, there is no statistically significant difference among other consumers. Single consumers with high incomes have higher social media addiction levels. Our findings indicate that students, single, young, and high-income consumers, are more dependent on social media. These findings are in parallel with Çağlıyan et al.'s (2016) study.

In the study of Baz (2018), social media addiction was analysed among university students. According to their results, university students use social media but do not show signs of addiction. Since the study sample constitutes young students, this result does not support our study. The reason for this is thought to be temporal differences due to the extremely rapid changes in the Internet and the increasing number of users every day. The changing marketing activities through the Internet have also created changes in advertising. The use of traditional advertising tools has moved towards web-based advertisements (Şahin, 2001: 44). These new marketing communication tools that reach the target audience correctly are also preferred by advertisers.

When the attitude towards online advertisements is measured, single consumers have higher positive attitudes towards online advertisements than married consumers. Moreover, while the attitudes of consumers in the age group of 36 and above towards online advertisements are more negative than all other consumers, there is no statistically significant difference among other consumers. In addition, students' attitudes towards online advertisements are higher than public employees. In other words, students approach online advertisements more positively.

The findings of our study are supported by the results of Yaman and Erdaş (2021). They aimed to find the differences between pop-up ads as an advertising tool according to X, Y, and Z generations. According to their findings, X and Y-generation consumers have a negative view of pop-up ads compared to the Z-generation. In other words, young consumers have a more positive attitude towards pop-ups and online advertising. Better use of technology by young consumers can enable them to develop a positive attitude towards advertisements. Moreover, according to another result of their research, negative attitudes towards advertisements and a decrease in purchase intention were observed as age increased.

Lee, Kwon, and Kim (2015) found that social media addiction hurts consumers' psychological wellbeing. Attitudes towards online advertisements were identified as a mediator between social media addiction and purchase intention. Chen, Hsu, and Lin (2013) examined factors influencing consumers' intention to shop online. It found that attitudes towards online advertisements partially mediate the relationship between social media addiction and purchase intention. Liang and Huang (2018) investigated the factors influencing online purchase intentions. It revealed that social media addiction significantly and indirectly affects online purchase intention through attitudes towards online advertisements. Our study also supported their findings. Female consumers have higher online purchase intentions compared to male consumers. While the online purchasing intentions of consumers with undergraduate and postgraduate education are higher than all other consumers, there is no statistically significant difference among other consumers. According to the age criterion, while the online purchasing intention of the consumers in the age group of 36 and above is lower than all other consumers, there is no statistically significant difference among other consumers. Additionally, consumers with an income of less than TL 10,000 have lower online purchase intentions than all other consumers. While the intention to buy online is higher among women and people with higher education levels, it is less among consumers aged 36 and over and with a low income.

Structural equation models were used to establish direct and indirect effects to test the research hypotheses, and all hypotheses were accepted. Upon examining the hypothesis results, it became clear that there is a significant and positive relationship between consumers' social addiction levels and their online purchase intentions. In other words, as social media addiction increases, so does the intention to buy online. Individuals with social media addiction are expected to spend more time online and are exposed to more advertisements, which can affect their purchase intentions. Our second hypothesis revealed that social media addiction levels have a significant and positive relationship with attitudes towards online advertisements. In other words, as social media addiction increases, positive attitudes towards online advertisements also increase.

The hypothesis regarding attitudes towards online advertisements having a significant and positive effect on purchase intention was also accepted. This means that if consumers have a positive attitude towards online advertisements, their purchase intention increases. Finally, the hypothesis that consumers' attitudes towards online advertisements mediate the significant and positive effect of their social media addiction levels on their online purchase intentions was also accepted. This result proves that attitudes towards online advertisements have a mediating role in online purchase intention. Although the results of this study cannot be generalised, they can serve as a reference for social media managers and online advertisers. They can use the findings as a reference to improve their marketing strategies. Specifically, focusing on enhancing consumers' attitudes towards online advertisements can lead to increased purchase intentions.

Online marketing managers can investigate and improve the reasons for the negative attitudes and low purchase intentions of consumers aged 36 and older towards online advertisements. This could help marketers address their specific concerns and tailor their approaches accordingly. In addition, companies targeting single, student, and young consumers should emphasise social media advertisements. Our findings could help marketers address their concerns and tailor their approaches accordingly. Future studies can benefit from the results of this study and conduct questionnaires with different age and product groups. Social media seems quite popular in the following years unless another means of communication is found. It's important to note that your study's results are specific to your sample and context. Generalising the findings to a broader population should be done with caution. However, the implications and insights gained from your research can serve as a starting point for further exploration and guide marketing practitioners.

Above all, based on the finding that "attitudes towards online advertisements mediate the relationship between social media addiction and online purchase intention", here are some practical suggestions for practitioners. First, they should focus on improving attitudes towards online advertisements. Given the mediating role of attitudes, it becomes crucial for practitioners to work towards fostering positive attitudes towards online advertisements among their target audience. This can be achieved through various means, such as creating engaging and relevant ad content, personalising ad experiences, and delivering value to consumers through online ads. Second, they should enhance the effectiveness of online advertising. Since attitudes towards online advertisements influence purchase intention, practitioners need to invest effort in optimising the quality and impact of their online advertising campaigns. This includes utilising persuasive messaging, appealing visuals, and compelling storytelling techniques to create favourable perceptions and positive attitudes towards the ads. Third, they should address concerns and objections. Addressing any negative perceptions or objections, consumers may have towards online advertisements is essential. Conducting market research or surveys to understand consumer concerns and preferences can provide insights into improving ad experiences and alleviating any issues that may hinder positive attitudes and purchase intentions. Fourth, they should target specific demographic groups recognising the differences in attitudes towards online advertisements among different demographic groups. If your study revealed that certain age groups or demographic segments have lower positive attitudes, focus on understanding their unique preferences, needs, and objections. Tailor your online advertising strategies to address those specific

concerns and enhance attitudes towards ads within those groups. Fifth, they should continuously monitor and evaluate ad performance, regularly assessing the effectiveness of their online advertising campaigns by monitoring key metrics such as click-through rates, conversion rates, and customer feedback. This will help you gauge the impact of your efforts in improving attitudes towards online advertisements and inform future optimisations. Sixth, they should personalise ad experiences using data-driven targeting and personalisation strategies to deliver relevant and tailored ad experiences to individual consumers. By aligning ad content with consumers' interests and preferences, you can enhance their attitudes towards online advertisements and subsequently increase their purchase intention. These suggestions could be adapted to a specific industry, target audience, and available resources. Further research and gathering feedback from target consumers will provide valuable insights for refining companies' online advertising strategies and optimising the impact of attitudes on purchase intention.

## **Peer-review:**

Externally peer-reviewed

## **Conflict of interests:**

The authors have no conflict of interest to declare.

## **Grant Support:**

The authors declared that this study had received no financial support.

## Acknowledgement:

We are indebted to the referees and the editor for their detailed and thoughtful comments that substantially improved the paper. We also thank the participant of our questionnaire.

## **Ethics Committee Approval:**

Ethics committee approval was received for this study from Recep Tayyip Erdogan University, Social and Humanities Ethics Committee on 14/11/2022 and 2022-298 document number.

## Author Contributions:

Idea/Concept/Design: G.B.T., R.G., Data Collection and/or Processing: R.G., G.B.T., Analysis and/or Interpretation: G.B.T., R.G., Literature Review: R.G., G.B.T., Writing the Article: G.B.T., R.G., Critical Review: G.B.T., R.G., Approval: G.B.T., R.G.

## References

Açıkel, E., & Çelikol, M. (2012). Dijitoloji (2), Kapital Medya Hizmetleri A.Ş.

- Akdeniz, P. C., & Koçer, L. L. (2022). Research on consumer attitude to online advertising: YouTube example. Turkish Journal of Marketing, 7(2), 50-71.
- Akkaya, D. T. (2013). The effect of consumer perceptions on their attitude, behaviour and purchase intention in social media advertising. Unpublished Doctoral Dissertation, Trakya University.
- Aksoy, H., & Gür, A. (2018). The influence of social media advertising on the purchasing intention of university students: Gaziantep University example. Cumhuriyet University Journal of Economics and Administrative Sciences, 19(1), 129-148.
- Akel, G. (2015). A study on consumers' purchase intention on the Internet: The case of Adnan Menderes University. Unpublished Master's Thesis, Pamukkale University.

- Baron, M., & Kenny, D. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic and statistical considerations. Journal of Personality and Social Psychology, 1173-1182.
- Barutçu, S., & Tomaş, M. (2013). Sustainable social media marketing and measuring effectiveness of social media marketing. Journal of Internet Applications and Management, 4(1), 5-24.
- Baz, F. Ç. (2018). Social media addiction: Study on university students. OPUS International Journal of Society Researches, 9(16), 276-295.
- Bentler, P. M., & Bonett, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. Psychological Bulletin, 88(3), 588-606.
- Byrne, B. M. (2016). Structural equation modeling with AMOS: Basic concepts, applications, and programming (3rd ed.). Routledge.
- Celep, E., & Çorumlu, B. (2022). Determining the relationship between nomophobic rendencies and social media use intensity with compulsive online buying behaviour: An application. Journal of Business Research, 14(2), 1339-1359.
- Chen, H. L., Hsu, Y. J., & Lin, S. W. (2013). Predicting consumer intention to shop online: An empirical test of competing theories. British Journal of Social Psychology, 52(4), 618-640.
- Çağlıyan, V., Hassan, S. A., & Işıklar, Z. E. (2016). Impact of social media Ads in college students' purchase behaviour: A research in Selcuk University. Selçuk University Journal of Social and Technical Researches, 11, 43-56.
- Çetin, O. I,. & Kumkale, İ. (2016). The mediating role of utilitarian motivation in the relation between the social media using level and the purchase intention. Balkan and Near Eastern Journal of Social Sciences, 2(4), 90-101.
- Çiftçi, H. (2018). Social media addiction in university students. MANAS Journal of Social Studies, 7(4), 417-434.
- Demirci, İ. (2019). The adaptation of the Bergen Social Media Addiction Scale to Turkish and the evaluation its relationships with depression and anxiety symptoms. Alpha Psychiatry, 20(1), 15-22. Doi:10.5455/Apd.41585
- Fandos, C., & Flavian, C. (2006). Intrinsic and extrinsic quality attributes, loyalty and buying intention: An analysis for a PDO product. British Food Journal, 108(8), 646-662.
- Flavian, C., & Guinaliu, M. (2006). Consumer trust, perceived security and privacy policy: Three basic elements of loyalty to a web site. Industrial Management and Data Systems, 106(5), 601-620.
- Gefen, D., Karahanna, E., & Straub, D. W. (2003). Trust and TAM in online shopping: An integrated Model. MIS Quarterly, 51-90.
- Gökdemir, Ş. Ş., & Akıncı, S. (2019). Consumer attitudes and privacy concerns for online behavioural advertising. Journal of Erciyes Communication, 1, 21-38.
- Griffiths, M. (2005). A 'components' model of addiction within a biopsychosocial framework. Journal of Substance Use, 10(4), 191-197.
- Hair, F. (2013). Multivariate Data Analysis, Pearson Education Limited.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). A primer on partial least squares structural equation modeling (PLS-SEM) (2nd ed.). Sage Publications.
- Hamidli, V. (2018). Extension of the theory of planned behaviour (TPB) by integrating online search intention and decision making styles: A practice on online purchase intention. Unpublished Doctoral Dissertation, Hacettepe University.
- Hawi, N. S., & Samaha, M. (2017). The relations among social media addiction, self-esteem, and life satisfaction in university students. Social Science Computer Review, 35(5), 576-586.
- Hayes, A. (2018). Introduction to mediaton, moderation and conditional process analysis: A regressionbased approach. New York: The Guildford Press.
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. Structural equation modeling: A Multidisciplinary Journal, 6(1), 1-55.

- İliş, A., & Gülbahçe, A. (2019). An investigation of the predictive relationship between social media addiction and communication skills. Journal of Ekev Academy, 23(78), 45-60.
- Kalaycı, Ş. (Ed.) (2006). SPSS uygulamalı çok değişkenli istatistik teknikleri. Ankara: Asil Yayın Dağıtım.
- Karadağ, M., & Ünal, A. (2022). The effect of consumer attitudes towards unethical online advertising on purchase intention. Journal of Business Innovation and Governance, 5(1), 1-21.
- Karagöz, Y. (2016). SPSS ve AMOS uygulamalı istatistiksel analizler, Ankara: Nobel.
- Kim, H. W., Xu, Y., & Gupta, S. (2012). Which is more important in Internet shopping, perceived price or trust? Electronic Commerce Research and Applications, 11(3), 241-252.
- Kim, L.H., Qu, H., & Kim, D. J., (2009). A study of perceived risk and risk reduction of rurchasing airtickets online. Journal of Travel and Tourism Marketing, 26(3), 203-224.
- Kline, R. (2010). Principles and practice of structural equation modeling (3rd ed.). New York: The Guilford Press.
- Kusumawati, A. (2017). Consumer attitudes toward online behavioural advertising: The social media involvement. Journal of Emerging Trends in Marketing and Management, 1(1), 88-94.
- Lee, Y., Kwon, O., & Kim, J. (2015). Social media addiction and psychological well-being: A study of Facebook and Twitter. Cyberpsychology, Behaviour, and Social Networking, 18(9), 51-57.
- Liang, S. H., & Huang, J. Y. (2018). Understanding online purchase intentions: Contributions from technology acceptance and self-determination perspectives. Telematics and Informatics, 35(2), 491-502.
- Manzoor, U., Baig, S. A., Hashim, M., & Sami, A. (2020). Impact of social media marketing on consumer's purchase intentions: The mediating role of customer trust. International Journal of Entrepreneurial Research, 3(2), 41-48.
- Nunnally, J.C. (1978). Psychometric Theory, 2nd ed., McGraw-Hill Book Company, New York, NY.
- Özdamar, K. (2016), Ölçek ve test geliştirme yapısal eşitlik modellemesi, IBM SPSS, IBM AMOS ve MINITAB uygulamalı. Eskişehir: Nisan Yayın Evi.
- Özdemir, S. S., Özdemir, M., Polat, E., & Aksoy, R. (2014). Social media concept and online advertising applications on social networking sites. Electronic Journal of Vocational Colleges, 4(4), 58-64.
- Petty, R. E., Fabrigar, L. R., & Wegener, D. T. (2003). Emotional factors in attitudes and persuasion, in handbook of affective sciences: Series in affective science, eds R. J. Davidson, K. R. Scherer, and H. H. Goldsmith. New York, Oxford University Press, 752–772.
- Saygılı, M. (2014). The effect on online purchase intention of utilitarian and hedonic shopping motivations. Unpublished Master's Thesis, Sakarya University.
- Singh, S., & Diamond, S. (2012). Social media marketing for dummies (3th ed.), Nobel.
- Sun, S., & Wang, Y. (2010). Familiarity, beliefs, attitudes, and consumer responses toward online advertising in China and the United States. Journal of Global Marketing, 23(2), 127-138.
- Şahin, A. (2001). The effects of Internet advertisements on the purchasing behaviours of Süleyman Demirel University students. Journal of Management and Economics, 8(1), 43-52.
- Tabachnick, B. G., & Fidell, L. S. (2013). Using multivariate statistics: Pearson New International Edition, Northridge: Pearson.
- Torun, E. (2017). The importance of Internet and social media on consumer purchase behaviour. Electronic Journal of Social Sciences, 6(62), 955-970.
- Yaman, F., & Erdaş, Y. (2021). As a digital advertising tool differentation of viewpoints of XYZ generations towards pop-up ads. Itobiad: Journal of the Human and Social Science Researches, 10(2), 1822-1838.