



## INVESTIGATION OF THE EFFECT OF SOCIAL MEDIA MARKETING ON DOCTOR BRANDING IN THE HEALTH SECTOR

### SAĞLIK SEKTÖRÜNDE SOSYAL MEDYA PAZARLAMASININ DOKTOR MARKALAŞMASI ÜZERİNE ETKİSİNİN İNCELENMESİ

Ali GÖDE<sup>1</sup>, Yunus Emre ÖZTÜRK<sup>2</sup>, Fatma Nuray KUŞCU<sup>3</sup>



1. Öğr. Gör., Hatay Mustafa Kemal Üniversitesi, Sağlık Hizmetleri Meslek Yüksekokulu, alig.sy31@gmail.com, <https://orcid.org/0000-0002-6865-6298>
2. Doç. Dr., Selçuk Üniversitesi, Sağlık Bilimleri Fakültesi, yunuseozturk@gmail.com, <https://orcid.org/0000-0002-6178-6129>
3. Öğr. Gör., Hatay Mustafa Kemal Üniversitesi, Sağlık Hizmetleri Meslek Yüksekokulu, nuraykuscusu@outlook.com, <https://orcid.org/0000-0003-2657-6174>

**Makale Türü** Article Type  
Araştırma Makalesi Research Article

**Başvuru Tarihi** Application Date  
14.04.2023 04.14.2023

**Yayına Kabul Tarihi** Admission Date  
06.10.2023 10.06.2023

**DOI**  
<https://doi.org/10.30798/makuiibf.xxxxx>

#### Abstract

In this research, it was conducted to examine the effect of social media marketing on doctor branding. In line with the purpose of the research; 547 people selected by simple random sampling method among the students continuing their education at the university constitute the research sample group and the data were collected by applying a face-to-face questionnaire. In the research, "Personal Information Form", "Social Media Marketing Scale in the Health Sector" and "Doctor Branding Scale" were used. Data were analyzed with SPSS. As a result of determining that the data are normally distributed as a method of analysis; simple linear regression, pearson correlation, ANOVA and independent groups t test were applied. As a result of the research, it was determined that the social media marketing of the participants had a statistically significant and positive effect on doctor branding. In the light of these results, it is predicted that the level of doctor branding will increase as individuals increase social media marketing in the health sector.

**Keywords:** Health Sector, Social Media Marketing, Physician Branding

#### Öz

Bu araştırmada, sosyal medya pazarlamasının doktor markalaşmasını üzerine etkisini incelemek amacıyla yapılmıştır. Araştırmanın amacı doğrultusunda; üniversitede eğitim öğretimine devam etmekte olan öğrenciler içersinden basit seçkisiz örneklem metodu ile seçilen 547 kişi araştırma örneklem grubunu oluşturmakta olup veriler yüz yüze anket uygulanarak toplanmıştır. Araştırmada, "Kişisel Bilgi Formu", "Sağlık Sektöründe Sosyal Medya Pazarlaması Ölçeği" ve "Doktor Markalaşması Ölçeği" kullanılmıştır. Veriler SPSS ile analiz yapılmıştır. Analiz metodu olarak verilerin normal dağıldığı belirlenmesi neticesinde; basit doğrusal regresyon, pearson korelasyon, ANOVA ve bağımsız gruplarda t testi uygulanmıştır. Araştırmanın neticesinde, araştırmaya katılanların sosyal medya pazarlamasının doktor markalaşmasını üzerine istatistiksel açıdan anlamlı ve pozitif yönlü bir etkisi olduğu tespit edilmiştir. Bu sonuçlar ışığında bireylerde sağlık sektöründe sosyal medya pazarlamasını artıkça doktor markalaşması düzeyinin de artacağı ön görülmektedir

**Anahtar Kelimeler:** Sağlık Sektörü, Sosyal Medya Pazarlaması, Doktor Markalaşması

## GENİŞLETİLMİŞ ÖZET

### Çalışmanın Amacı

Araştırmanın amacı, sosyal medya pazarlamasının doktor markalaşması üzerindeki etkilerini araştırmak, sağlık sektöründeki doktorların sosyal medya kullanım alışkanlıklarını ve bu kullanımın doktorların online itibarına olan etkisini incelemektir. Bu çalışma, sosyal medya pazarlamasının doktor markalaşması üzerindeki etkisini daha iyi anlamak ve sağlık sektöründeki doktorların sosyal medya stratejilerine yönelik öneriler sunmak amacıyla yapılmaktadır.

### Araştırma Soruları

Sağlık sektöründe sosyal medya pazarlamasının doktor markalaşması üzerine etkisinin incelenmesi, sosyal medya kullanımının doktorların online itibarına olan etkisini daha iyi anlamak ve doktor markalaşması stratejilerine yönelik öneriler sunmak amacıyla yapılır. Bu çalışmada, sağlık sektöründeki doktorların sosyal medya kullanım alışkanlıkları, hangi sosyal medya kanallarının daha etkili olduğu, hastaların doktorlar hakkında bilgi edinmek için ne kadar sık sosyal medyayı kullandıkları ve sosyal medya pazarlaması stratejilerinin doktor markalaşması üzerindeki etkileri gibi konular ele alınmaktadır. Ayrıca, doktorların sosyal medya kullanımının hastaların sağlık hizmetlerine olan güvenini artırıp artırmadığı ve sosyal medya pazarlamasının sağlık sektöründeki hastaneler veya kliniklerin markalaşmasını da etkileyip etkilemediği gibi sorular da cevaplanmaya çalışılmaktadır.

### Literatür Araştırması

Tosyalı ve Sütçü (2019) tarafından yapılan araştırmada, sağlık iletişimde sosyal medya kullanımının bireyler üzerindeki etkileri araştırılmıştır. Araştırmanın sonuçları, sosyal medya kullanımının doktorların markalaşması ve tanınırlığını artırdığını göstermiştir. Vardarlier ve Öztürk (2020) tarafından yapılan araştırmada, sağlık iletişimde sosyal medya kullanımının rolü incelenmiştir. Araştırmanın sonuçları, sosyal medya kullanımının doktorların markalaşmasına ve tanınırlığını artırdığı, aynı zamanda hastaların doktorları hakkında bilgi edinmek için sosyal medyayı sıkça kullandığı göstermiştir. Fener ve Çimen (2016) tarafından yapılan araştırmada, hastane ve hekim tercihinde sosyal medyanın etkisine yönelik bir araştırma yapılmıştır. Araştırmanın sonuçları, sosyal medya kullanımının doktorların markalaşmasına ve hastaların doktorlar hakkında bilgi edinmelerine yardımcı olduğunu göstermiştir. Ayrıca, doktorların sosyal medya kullanımının artmasıyla birlikte, doktorların online itibarlarının da önem kazandığı düşünülmektedir. Bu çalışmalar, sosyal medya pazarlamasının sağlık sektöründe doktor markalaşması üzerinde önemli bir etkisi olduğunu göstermektedir. Sosyal medya kullanımının artmasıyla birlikte, doktorların online itibarlarının da önem kazandığı ve sosyal medyanın doktorların markalaşması ve tanınırlığını artırdığı görülmektedir.

### Yöntem

Araştırmanın amacı doğrultusunda; üniversitede eğitim öğretimine devam etmekte olan öğrenciler içersinden basit seçkisiz örneklem metodu ile seçilen 547 kişi araştırma örneklem grubunu oluşturmakta olup veriler yüz yüze anket uygulanarak toplanmıştır. Araştırmada, “Kişisel Bilgi Formu”, “Sağlık Sektöründe Sosyal Medya Pazarlaması Ölçeği” ve “Doktor Markalaşması Ölçeği”

kullanılmıştır. Veriler SPSS ile analizleri yapılmıştır. Katılımcıların demografik ve tanımlayıcı verilerin (yaş, cinsiyet, eğitim alınan program (bölüm), internette geçirilen zaman ve en çok kullanılan sosyal medya ağı) belirlenmesi adına frekans ve yüzde hesaplamaları yapılmıştır. Analiz metodu olarak verilerin normal dağıldığı belirlenmesi neticesinde; basit doğrusal regresyon, pearson korelasyon, ANOVA ve bağımsız gruplarda t testi uygulanmıştır.

### **Sonuç ve Değerlendirme**

Araştırmanın amacını doğrultusunda sağlık sektöründe sosyal medya pazarlamasının doktor markalaşması üzerine etkisi incelemek için basit doğrusal regresyon analizi yapılmıştır. Analize göre oluşturulan model (F: 335,58;  $p < 0,001$ ) ve regresyon katsayılarının anlamlılığına gösteren t istatistik değerlerini incelendiğinde (t: 18,319;  $p < 0,001$ ) elde edilen sonuçların istatistiksel açıdan anlamlı düzeyde olduğu gözlemlenmiştir. Değişkenler arası ise istatistiksel açıdan anlamlı (R: 0,480;  $p < 0,001$ ) ve pozitif yönlü bir ilişki tespit edilirken, R kare değeri 0,381 olarak tespit edilmiştir. Bu sonuca göre doktor markalaşmasındaki değişimin %38,1'lik kısmı sağlık sektöründe sosyal medya pazarlamasındaki değişimler ile açıklanmaktadır. Basit doğrusal regresyon analizi sonucuna göre sağlık sektöründe sosyal medya pazarlamasının doktor markalaşması üzerine istatistiksel açıdan pozitif ve anlamlı etkisi olduğu belirlenmiştir ( $p < 0,001$ ). Bu sonuçlar neticesinde kişilerde sağlık sektöründe sosyal medya pazarlamasını artıca doktor markalaşması düzeyinin de artacağı ön görülmektedir.

## 1. INTRODUCTION

The healthcare industry differs from perfect competitive market conditions due to its unique characteristics. When conducting marketing activities, extra care must be taken as the outcome affects individual health and public health on a larger scale, and the consequences are difficult to reverse. The significant increase in the use of information and communication technologies and the existence of social media as a major component of communication have also pushed healthcare institutions to share content on these platforms. In fact, physicians, who are a major force in the industry, can easily reach their potential patients by sharing informative texts, videos, and visuals on their own pages. Through these posts, potential patients who do not want to switch to another doctor can easily access a variety of information by examining social media accounts, such as the number of followers, the number of posts and likes, direct feedback from the physician or team, the ability to follow the physician like a family member at any time, success stories, and comments, likes, and recommendations from other healthy and sick individuals.

This situation leads to the physician being one step ahead of other doctors. As diseases are inherently a condition of discomfort, patients want to feel comfortable during their examination and treatment. Being able to watch a doctor's posts before getting sick and going to the hospital creates a sense of familiarity, making the patient feel more comfortable. In this context, physicians even purchase professional support to manage their social media accounts. Limited time for this, the desire to make eye-catching posts, the desire to surpass competitors and differentiate themselves, or the perception of this path as a strong channel towards branding pushes them to take this action.

The power of social media has brought up the topic of doctor branding as a new area of research in the healthcare industry. In this study, we aim to quantify the extent to which social media has affected doctor branding by providing concrete information to interested parties.

## 2. SOCIAL MEDIA MARKETING IN THE HEALTHCARE INDUSTRY

In recent years, social media has emerged as a rapidly growing concept in terms of usage frequency and popularity. Social media are network-based applications that have advantages and disadvantages, and enable interactions between individuals. Social media is a powerful tool that provides collaboration among users and serves as a social interaction mechanism for various individuals. (Baruah, 2021; Lomborg, 2015). Social media marketing is the marketing that is carried out through social networks, online communities, and more (Coşkun & Şener, 2020).

Social media enables marketers to stimulate community involvement and strengthen other communication activities on social platforms and the internet. Additionally, social media platforms facilitate word-of-mouth marketing, enabling information about products or services to spread rapidly among people and bring more customers to businesses (Coşkun & Şener, 2020). In recent years, social

media has emerged as a rapidly rising concept in terms of usage frequency and visibility. Social media are network-based applications that have advantages and disadvantages and enable interactions among people. Social media is a powerful tool that facilitates collaboration among users and serves as a social interaction mechanism for various individuals. Its functions, such as communication, interaction, questioning, commenting, and the ability to be available 24/7, enable simple feedback, flexible structure, quick updates, and easy sharing of opinions without being dependent on anyone. Moreover, it provides inexpensive and effortless viewing of results, making it an indispensable concept of the 21st century (Baydaş et al., 2021).

Today, healthcare institutions have been forced to operate like businesses and have started to view patients as customers. Some of the reasons for this situation include an increase in the number of products and services offered, an increase in providers in the market, an increase in patients' knowledge and expectations, the diversification of devices and materials due to the development of information and communication technologies, rising investment costs for providers, and rapidly changing market conditions (Temel & Akıncı, 2016).

Social media, like many other aspects of life, has become a popular resource actively used by doctors, who are one of the most important components of the healthcare sector. By offering a platform where individuals, healthcare professionals, and patients can communicate about health issues, social media has brought a new dimension to healthcare services with the potential to improve health outcomes. While the use of social media for health communication has many benefits, it is important to monitor the reliability and quality of information exchanged, as well as to safeguard users' information, privacy, and confidentiality (Moorhead et al., 2013).

The need for healthcare services differs from the need for other products and services. This need can be urgent, there may not be a substitute, and there may be no possibility of return, making it different from other sectors. In such an emergency situation, if a patient following a doctor's activities on social media systematically stays in communication, they are likely to trust the positive impressions created, and the institution where the doctor works is likely to be the first choice for seeking medical help (Zengin et al., 2022).

### **3. DOCTOR BRANDING**

A word, letter, number, packaging, sign, logo, or symbol that distinguishes a service or product from others is called a brand. Thus, the brand provides functions such as distinctiveness, guarantee, trustworthiness, and indication of the source of the product or service in question (Gümüş, 2013). The primary purpose of branding is to protect companies against potential risks. The secondary purpose is to facilitate the purchase of the product for buyers, provide a guarantee of product quality, and thus establish customer loyalty. Additionally, branding can serve as a guide for buyers on where to turn in case of problems (Gemci et al., 2009).

The concept of branding has evolved in the early 1990s and has taken over almost every market and sector worldwide. The value of branding in the healthcare community has been attracting attention for the last 25 years on average. Private healthcare institutions are operating with the aim of providing higher quality services to more patients due to the increase in the number and share of private healthcare institutions and their competition among themselves, as well as the entry of public hospitals into this competition (Salameh et al., 2022).

The primary objective of branding efforts in healthcare institutions is to establish strong communication with patients and ensure its long-term sustainability. This is driven by the increasing brand value of healthcare institutions. In this context, doctors, who are the main determinants of the service, play a crucial role. They also benefit from branding efforts to differentiate themselves from competitors and reach more potential patients (Ayaz, 2017). An environment of intimacy, respect, and affection that may arise during service delivery and acquisition enhances the trust in doctors. This communication, especially with vulnerable groups such as children and the elderly, positively affects their behavior, resulting in repeated visits (Işık, 2016).

The increasing reliance of patients on visual content such as videos or images, coupled with doctors creating educational and informative videos to share with their target audience, has become an important factor in building trust with potential patients. Having previously watched a doctor's video on a specific topic can greatly increase the trust a patient feels towards them before even beginning treatment. Through these visual and video resources, patients can see and learn about a doctor's expertise, gestures and facial expressions, thought processes, manner of expression, and tone of voice, among other characteristics, before actually receiving any services. This can help patients relax and, if satisfied, foster loyalty towards the doctor without the need for additional marketing efforts (Şantaş & Şantaş, 2020).

The behavior of the doctor is considered within the scope of personal branding. Personal branding is the act of an individual wanting to become visible in a certain environment or for a certain purpose, and breaking free from the anonymity of their profession. For online individuals, personal branding is a very important business concept as it can help differentiate a personal brand from its competitors by showcasing personal performances that offer a sense of individuality (Luca et al., 2015). The activity carried out within the scope of doctor branding continues as a process of disclosing the brand identity, positioning the brand for potential patients, and then creating and evaluating the brand image (Kim et al., 2016; Zhang et al., 2021).

## **4. METHODOLOGY**

### **4.1. Purpose of the research**

The aim of this research is to investigate the effects of social media marketing on doctor branding, examine the social media usage habits of doctors in the healthcare sector and its impact on their online reputation. This study is conducted to better understand the impact of social media marketing on doctor branding and to provide recommendations for social media strategies for doctors in the healthcare sector.

### **4.2. Universe and Sample**

This study was conducted with students who are continuing their education activities at Hatay Mustafa Kemal University Health Services Vocational School. Scale questions were applied face-to-face to patients in all departments on a voluntary basis and with a non-random simple sampling method. The research data was collected between 15.11.2022-01.01.2023, and it was determined that there were 1300 students enrolled in the vocational school during the research period. In our study, assuming the population is 1300, when the sample calculation is made with a 95% confidence interval, it was determined that reaching 384 students was sufficient (Yazıcıoğlu & Erdoğan, 2004). The study reached 547 students during the specified period, and it was concluded that this number was sufficient as a sample size.

### **4.3. Data Collection Tools**

"Personal Information Form", "Social Media Marketing Scale in the Health Sector" and "Doctor Branding Scale" were used to collect data in the research.

**Personal Information Form;** It consists of expressions to determine the age, gender, program (department) of university students, time spent on the internet and the most used social media network.

**Social Media Marketing Scale in Health Sector;** It has been adapted into Turkish by Aydın (2020) and consists of 34 expressions and one dimension to measure social media marketing of individuals in the health sector. The items in the scale are scored on a five-point Likert-type scale as "1-Strongly disagree, 2-Disagree, 3-Undecided, 4-Agree, 5-Strongly agree". The Cronbach's Alpha reliability value of Aydın (2020) research was calculated as 0.892. When the reliability of the Social Media Marketing Scale in the Health Sector is examined, the Cronbach Alpha reliability value is 0.852. This reliability value shows that the Social Media Marketing scale in the Health Sector is quite reliable (Kalaycı, 2017; Munro, 2005).

**Doctor Branding Scale;** It was prepared by Ayaz (2017) and consists of 12 expressions and one dimension. The items in the scale are scored on a five-point Likert-type scale as "1-Strongly disagree, 2-Disagree, 3-Undecided, 4-Agree, 5-Strongly agree". Statements prepared to measure the doctor's branding; It consists of items such as the physician's qualifications, gender, experience and examination

price. The Cronbach's Alpha reliability value of Ayaz (2017) research was calculated as 0.812. When the reliability of the Physician Branding Scale was examined, the overall scale Cronbach Alpha reliability value was 0.792. This reliability value shows that the scale of the Doctor Branding Scale is reliable (Kalaycı, 2017; Munro, 2005).

#### **4.4. Data Collection and Analysis**

After obtaining necessary permissions from the scale owners and ethics committee, the scale questions were administered face-to-face using a voluntary approach in all departments of the vocational school continuing their education activities. Data obtained from the applied scales were analyzed using the SPSS program. Frequency and percentage calculations were performed to determine participants' demographic and descriptive data such as age, gender, educational program (department), time spent on the internet, and the most commonly used social media platform

To determine whether there were significant differences among students participating in the study in terms of social media marketing in the healthcare sector and doctor branding with variables such as age, gender, field of study, grade level, chronic illness status, continuous medication use status, and time spent on the internet, independent groups t-test, ANOVA, Pearson correlation, and simple linear regression analyses were applied after verifying that the data were not significantly deviated from normal distribution.

#### **4.5. Ethical Aspect of Research**

Before applying the data collection form in the study, ethics committee approval was obtained with the decision of Hatay Mustafa Kemal University Social and Human Sciences Scientific Research and Publication Ethics Committee dated 02.11.2022 and numbered 05.

### **5. RESULTS**

In the findings part of the study, firstly, the socio-demographic characteristics of the participants from whom data were obtained are included (Table 1).

547 students participated in the study and 69.5% of the participants who agreed to participate were female, while 30.5% were male. It was determined that 47.5% of the participants were between 18-19 years old, 42.8% were between 20-21 years old, and 9.7% were 22 years and older. Of the students, 10.8% were enrolled in Anesthesia, 21.2% in Emergency Medical Services, 11.2% in Occupational Therapy, 18.1% in Medical Documentation and Secretarial Services, 17.2% in Medical Imaging Techniques, 9.7% in Medical Laboratory Techniques, and 11.8% in Elderly Care programs. 36.9% of the students reported spending 0-3 hours, 49.4% spent 4-6 hours, and 13.7% spent 7 or more hours on the internet. In terms of social media usage, 20.2% reported using YouTube, 11.4% reported using Twitter, 58.1% reported using Instagram, and 9.7% reported using other social media applications more frequently.

**Table 1.** Socio-Demographical Characteristics of the Participants

Demographic features	Options	N	%
Gender	Woman	380	69,5
	Male	167	30,5
Age	18-19 years old	260	47,5
	20-21 years old	234	42,8
	22 years and older	53	9,7
Program studied (department)	Anesthesia	59	10,8
	First and Emergency Aid	116	21,2
	Occupational Therapy	61	11,2
	Medical Documentation and Secretariat	99	18,1
	Medical Imaging Techniques	94	17,2
	Medical Laboratory Techniques	53	9,7
Time spent on the internet	Elderly care	65	11,8
	0-3 hours	202	36,9
	4-6 hours	270	49,4
Most used social media app	7 hours or more	75	13,7
	Youtube	114	20,8
	Twitter	62	11,4
	Instagram	318	58,1
	Other	53	9,7
<b>TOTAL</b>		<b>547</b>	<b>100.00</b>

Distribution of Skewness and Kurtosis data between “-1 and +1” according to Kalaycı (2017) and between “-1.5 and +1.5” according to Tabachnick & Fidell, (2013) shows that the data do not deviate from the normal distribution. The results of the normality test examination for the scale and its dimensions used in the study are presented in Table 2.

**Table 2.** Normality Test Analysis Data

	Mean	Standard deviation	Skewness	Kurtosis
Social Media Marketing in the Healthcare Industry	3,48	0,44	-0,198	0,931
Doctor Branding	3,53	0,61	-0,490	0,840

When the data obtained from the participants in Table 2 are taken into account, it was concluded that the Skewness and Kurtosis values of the data did not deviate from the normal distribution. As a result, it was decided to apply parametric analyses in the subsequent analyses

The aim of the study was to determine whether there was a statistically significant difference between the socio-demographic characteristics of the participants and their scores on social media marketing and doctor branding in the healthcare sector, using parametric analysis methods such as independent groups t-test and ANOVA test. The results are presented in Tables 3 and 4.

**Table 3.** The Results of the Independent Groups t-Test and ANOVA Test Analysis Between the Demographic Characteristics of the Participants and Social Media Marketing in the Health Sector

Demographic features	Options	N	Mean	Standard deviation	t veya F değeri	p
Gender	Woman <sup>1</sup>	380	3,49	0,41	0,459	0,625
	Male <sup>2</sup>	167	3,47	0,49		
Age	18-19 years old <sup>1</sup>	260	3,44	0,41	3,739	<b>0,024*</b> 1<3
	20-21 years old <sup>2</sup>	234	3,49	0,46		
	22 years and older <sup>3</sup>	53	3,62	0,48		
Program studied (department)	Anesthesia <sup>1</sup>	59	3,50	0,43	1,134	0,148
	First and Emergency Aid <sup>2</sup>	116	3,43	0,42		
	Occupational Therapy <sup>3</sup>	61	3,44	0,40		
	Medical Documentation and Secretariat <sup>4</sup>	99	3,57	0,38		
	Medical Imaging Techniques <sup>5</sup>	94	3,56	0,44		
	Medical Laboratory Techniques <sup>6</sup>	53	3,38	0,43		
	Elderly care <sup>7</sup>	65	3,43	0,57		
Time spent on the internet	0-3 hours <sup>1</sup>	202	3,43	0,44	1,871	0,155
	4-6 hours <sup>2</sup>	270	3,51	0,44		
	7 hours or more <sup>3</sup>	75	3,52	0,43		
Most used social media app	Youtube <sup>1</sup>	114	3,55	0,37	1,257	0,289
	Twitter <sup>2</sup>	62	3,46	0,52		
	Instagram <sup>3</sup>	318	3,46	0,43		
	Other <sup>4</sup>	53	3,47	0,48		

**\*p<0,05**

When Table 3 is examined, a statistically significant difference ( $p<0.05$ ) was found between the age and the scores of the participants in social media marketing in the healthcare sector, while no statistically significant difference ( $p>0.05$ ) was found between the group mean scores of gender, educational program (department), time spent on the internet, and the most used social media network

When Table 4 is examined, a statistically significant difference was found between the age and doctor branding scores of the students who participated in the research ( $p<0.05$ ), while no statistically significant difference was found between the gender, education program (department), time spent on the internet, and the group mean scores of the most used social media platform ( $p>0.05$ )

Pearson correlation analysis was conducted to determine the correlation between social media marketing in the healthcare sector and doctor branding among the participating students. As a result of the analysis, a positive and significant correlation was found between social media marketing in the healthcare sector and doctor branding ( $p<0.001$ ,  $r=0.617$ )

**Table 4.** Results of the t-Test and ANOVA Test Analysis in Independent Groups Between the Demographic Characteristics of the Participants and Physician Branding

Demographic features	Options	N	Mean	Standard deviation	t veya F değeri	p
Gender	Woman <sup>1</sup>	380	3,50	0,58	-1,366	0,173
	Male <sup>2</sup>	167	3,58	0,69		
Age	18-19 years old <sup>1</sup>	260	3,45	0,61	5,530	<b>0,004*1</b> <3
	20-21 years old <sup>2</sup>	234	3,56	0,62		
	22 years and older <sup>3</sup>	53	3,74	0,61		
Program studied (department)	Anesthesia <sup>1</sup>	59	3,46	0,64	1,328	0,131
	First and Emergency Aid <sup>2</sup>	116	3,48	0,65		
	Occupational Therapy <sup>3</sup>	61	3,52	0,49		
	Medical Documentation and Secretariat <sup>4</sup>	99	3,66	0,50		
	Medical Imaging Techniques <sup>5</sup>	94	3,64	0,61		
	Medical Laboratory Techniques <sup>6</sup>	53	3,45	0,47		
	Elderly care <sup>7</sup>	65	3,38	0,83		
Time spent on the internet	0-3 hours <sup>1</sup>	202	3,47	0,63	1,256	0,286
	4-6 hours <sup>2</sup>	270	3,56	0,60		
	7 hours or more <sup>3</sup>	75	3,56	0,62		
Most used social media app	Youtube <sup>1</sup>	114	3,56	0,58	0,287	0,835
	Twitter <sup>2</sup>	62	3,49	0,65		
	Instagram <sup>3</sup>	318	3,52	0,62		
	Other <sup>4</sup>	53	3,57	0,63		

\*p<0,05

**Table 5.** The Effect of Social Media Marketing on Physician Branding in the Health Sector

Variable	Unstandardized Coefficients		Standardized Coefficients	t	p	F	Model (p)
	B	Std. Error	β				
Still	0,525	0,165		3,171	0,002**		
Social Media Marketing in the Healthcare Industry	0,862	0,047	0,617	18,319	0,000*	335,58	0,000*

R<sup>2</sup>: 0.381 R: 0.617 \*p<0.001 \*\* p<0.05 Regression Equation of the Model: Y=0.525+ (0.862X)

Simple linear regression analysis was conducted in Table 5 to examine the effect of social media marketing in the healthcare industry on doctor branding, in line with the purpose of the study. According to the analysis, when examining the model (F: 335.58; p<0.001) and the t-statistic values indicating the significance of the regression coefficients (t: 18.319; p<0.001), the results were found to be statistically significant. The relationship between variables was also statistically significant (R: 0.480; p<0.001) and

positively correlated, with an  $R^2$  value of 0.381. Therefore, 38.1% of the variation in doctor branding can be explained by changes in social media marketing in the healthcare industry. Based on the results of the simple linear regression analysis, it was determined that social media marketing in the healthcare industry has a statistically significant and positive effect on doctor branding ( $p < 0.001$ ).

## 6. DISCUSSION

The purpose of this study was to examine the effect of social media marketing on doctor branding. A total of 547 students participated in the study, with 69.5% of the participants being female and 30.5% male. Of the participants, 47.5% were in the 18-19 age range, 42.8% in the 20-21 age range, and 9.7% were 22 years old and over. It was found that 10.8% of the students were enrolled in Anesthesia, 21.2% in First Aid and Emergency, 11.2% in Occupation and Therapy, 18.1% in Medical Documentation and Secretarial, 17.2% in Medical Imaging Techniques, 9.7% in Medical Laboratory Techniques, and 11.8% in Elderly Care programs. 36.9% of the students spent 0-3 hours, 49.4% spent 4-6 hours, and 13.7% spent 7 hours or more on the internet, with 20.2% using YouTube, 11.4% using Twitter, 58.1% using Instagram, and 9.7% using other social media applications.

Statistically significant differences were found between social media marketing in the healthcare sector and age among the participating students, while no statistically significant differences were found among gender, educational program (department), time spent on the internet, and group mean scores of the most used social media platform. As students get older, their exposure time to social media increases, which is thought to be associated with being more susceptible to the influence of social media. In the study conducted by Fener and Çimen (2016), differences were found among age variables, but no differences were found among gender and education status variables. In the study conducted by Aydın (2020), differences were found among age and education status variables, but no differences were found among gender variables. In the study conducted by Tamer Gencer et al. (2019) with students, no differences were found between attitudes towards accessing and using health information through social media and gender, age, and time spent on social media. In the study conducted by Şahinli and Yamak (2021) with students, no differences were found between social media and gender, age, education program, and time spent on social media.

While a statistically significant difference was found between age and doctor branding among the students participating in the study, no statistically significant difference was found among gender, educational program (department), time spent on the internet, and group average scores of the most used social media platforms. The difference in the age variable is thought to be similar while being influenced by social media marketing. In the study conducted by Ayaz (2017), no difference was found between doctor branding and gender, age, and educational program (department) variables. In the study conducted by Tüfekci et al. (2016) with patients, no significant difference was found in the gender variable with branding. In Aydın (2021)'s thesis, conducted on 436 patients, there was no significant

difference based on gender, age, and educational status in the trust factor, which is the factor that enables the doctor's branding. While Güleç (2016) found a significant difference based on gender in the doctor-related factor sub-dimension in hospital preference with 504 participants, no significant difference was found in age and educational status variables.

A simple linear regression analysis was conducted to examine the effect of social media marketing on physician branding in the healthcare sector in line with the aim of the study. According to the results of the simple linear regression analysis, it was determined that social media marketing has a statistically significant positive effect on physician branding in the healthcare sector ( $p < 0.001$ ). In the study conducted by Tosyalı and Sütçü (2019), the effects of social media use on individuals in health communication were investigated. The results of the research showed that the use of social media increased the branding and recognition of doctors. In the research conducted by Vardarlier and Öztürk (2020), the role of social media use in health communication was examined. The results of the study showed that the use of social media increased the branding and recognition of doctors, while patients frequently used social media to learn about their doctors. In the study conducted by Fener and Çimen (2016), a study was conducted on the effect of social media on hospital and physician preference. The results of the study showed that the use of social media helps doctors brand and patients learn about doctors. In addition, with the increase in the use of social media by doctors, it is thought that the online reputation of doctors is gaining importance. Fener and Çimen (2016) found that individuals who value promotion and sharing on social media before physician and hospital preference have a high potential to share information about their satisfaction after healthcare services on social media. In addition, it has been stated that with the increasing use of social media by doctors, the online reputation of doctors has gained importance. In the study conducted by Şahinli and Yamak (2021), it was highly indicated that social media sharing networks create attitude and behavior changes in the desired direction for patients and hospitals. According to the research conducted by Özkavcı (2021), social media is a powerful tool to improve the quality of healthcare services if used correctly. Social media networks such as Twitter, Facebook, Instagram and YouTube create extraordinary marketing opportunities for physicians.

Research shows that the use of social media in health helps in branding doctors and helping patients learn about doctors. In addition, as doctors' involvement in social media increases, their reputation on the internet becomes more important.

## **7. CONCLUSION AND RECOMMENDATION**

Our research was conducted to examine the effect of social media marketing on doctor branding in the health sector. As a result of the research, it was determined that there is a relationship between social media marketing and doctor branding in the health sector. As a result of the subsequent analysis, it has been shown that social media marketing in healthcare has a significant impact on doctor branding.

In health, social media has become an important tool for doctors to brand and reach doctors to their patients. Social media allows doctors to easily access up-to-date content, answer their questions, and introduce themselves to their patients. In addition, thanks to social media, patients can evaluate doctors' areas of expertise, treatment methods and service quality. As a result, social media marketing in the healthcare industry plays an effective role in the branding of doctors and makes it easier for doctors to reach their patients. However, doctors need to use social media correctly and ethically, because social media is a platform that many people can access, and the dissemination of false or misleading information can have serious consequences in the field of health. In addition, physicians' adherence to ethical codes of conduct helps them gain the trust of patients and create a better environment to deliver healthcare. Otherwise, the dissemination of misleading or false information can put patients' health at risk and damage the professional reputation of doctors.

The following recommendations can be given to doctors who want to build their brands through social media in the health sector:

- By knowing their target audience well, they can prepare their content according to the needs of these audiences.
- They can provide content that is accurate, up-to-date and meets the needs of patients.
- By updating their accounts regularly and answering patients' questions, they can increase their brand value.
- By taking care to comply with ethical rules, they can protect the privacy rights of patients and avoid sharing misleading information.
- By taking into account the positive comments of patients, they can increase brand loyalty.
- By sharing their vision and values, they can establish a closer relationship with patients.
- By using photo and video content, they can make their accounts more attractive.
- By providing references and recommendations, they can gain the trust of patients.
- By collaborating with other healthcare professionals, they can increase brand visibility.
- Using statistics and analytics, they can measure the effectiveness of their social media accounts.

These research results show the importance of social media marketing by doctors in the health sector. Physicians should seize opportunities to promote their brands, connect more closely with their patients, and increase brand loyalty using their social media accounts. At the same time, it shows that doctors should keep the content of their social media accounts up-to-date and continue to engage patients and increase brand loyalty.

## REFERENCES

- Ayaz, M. (2017). *Sağlık sektöründe kişisel markalaşma: tercih edilen doktorun markalaşmasının hastane tercihinin etkisi*. [Yayımlanmamış yüksek lisans tezi]. İstanbul Aydın Üniversitesi.
- Aydın, İ. (2020). *Sağlık sektöründe sosyal medya pazarlaması (Kağıthane Bölgesi özel hastaneler örneği)*. [Yayımlanmamış yüksek lisans tezi]. Beykent Üniversitesi.
- Aydın, O. A. (2021). *Hekime ve Hastaneye Güven İle Hastane Tercihi Arasındaki İlişki Üzerine Bir Araştırma*. [Yayımlanmamış yüksek lisans tezi]. Sakarya Üniversitesi.
- Baruah, T. D. (2021). Effectiveness of social media as a tool of communication and its potential for technology enabled connections: a micro-level study. *International Journal of Scientific and Research Publications*, 2(5), 1–10.
- Baydaş, A., Ata, S. & Berdibek, U. (2021). Sağlık Kurumlarında Sosyal Medya Pazarlaması (Ed.), *Sağlık Sektöründe Uygulanan Güncel Pazarlama Yaklaşımları* içinde (185-212). Kriter Yayınevi.
- Coşkun, E. & Şener, B. Ç. (2020). Türkiye’de Covid-19 sürecinde sosyal medya pazarlaması: Pegasus ve Bim Örneği. *İNİF E- Dergi*, 5(2), 27–42.
- Fener, E. & Çimen, M. (2016). Hastane ve hekim tercihinde sosyal medyanın etkisine yönelik bir araştırma. *The Journal of International Social Research*, 9(47), 836–846.
- Gemci, R., Gülşen, G. & Kabasakal, F. M. (2009). Markalar ve markalaşma şartları. *Uludağ Üniversitesi Mühendislik-Mimarlık Fakültesi Dergisi*, 14(1), 105–114.
- Güleç, Ş. N. (2016). *Özel hastane tercihinde kurumsal imajın rolü üzerine teorik ve uygulamalı bir çalışma*. [Yayımlanmamış yüksek lisans tezi]. Selçuk Üniversitesi.
- Gümüş, S. (2013). *Pazarlamada markalaşma stratejileri*. Hiperlink Yayınları.
- Işık, O. (2016). Algılanan kalitenin hastane marka değerine etkisi. *Araştırma Hacettepe Sağlık İdaresi Dergisi*, 19(1), 57–72.
- Kalaycı, Ş. (2017). *SPSS uygulamalı çok değişkenli istatistik teknikleri*. Dinamik Akademi Yayınları.
- Kim, H. W., Kankanhalli, A. & Lee, H. L. (2016). Investigating decision factors in mobile application purchase: A mixed-methods approach. *Information & Management*, 53(6), 727–739.
- Lomborg, S. (2015). “Meaning” in social media. *Social Media and Society*, 1(1), 1-2. <https://doi.org/10.1177/2056305115578673>
- Luca, F. A., Ioan, C. A. & Sasu, C. (2015). The Importance of the Professional Personal Brand. The Doctors’ Personal Brand. *Procedia Economics and Finance*, 20, 350–357. [https://doi.org/10.1016/S2212-5671\(15\)00083-0](https://doi.org/10.1016/S2212-5671(15)00083-0)
- Moorhead, S. A., Hazlett, D. E., Harrison, L., Carroll, J. K., Irwin, A. & Hoving, C. (2013). A new dimension of health care: Systematic review of the uses, benefits, and limitations of social media for health communication. *Journal of Medical Internet Research*, 15(4). <https://doi.org/10.2196/JMIR.1933>
- Munro, B. H. (2005). *Statistical methods for health care research* (Vol. 1). Lippincott Williams & Wilkins.
- Özkavcı, E. (2021). *Dijital dönüşüm çağında İstanbul’da bulunan özel ağız ve diş sağlığı merkezlerinde dijital pazarlama kullanımı*. [Yayımlanmamış yüksek lisans tezi]. İstanbul Gelişim Üniversitesi.
- Salameh, A. A., Aman-Ullah, A., Mehmood, W. & Bin Abdul-Majid, A. H. (2022). Does

- employer branding facilitate the retention of healthcare employees? A mediation moderation study through organisational identification, psychological involvement, and employee loyalty. *International Journal of Hospitality Management*, 1-8. <https://doi.org/10.1016/J.IJHM.2022.103414>
- Şahinli, S. & Yamak, H. C. (2021). Sağlık bilimleri lisansiyerleri bakış açısıyla sosyal medyanın hasta davranışları üzerine etkisi. *Acıbadem Üniversitesi Sağlık Bilimleri Dergisi*, 12(2), 335–339.
- Şantaş, G. & Şantaş, F. (2020). Güncel pazarlama yaklaşımlarının sağlık hizmetlerinde uygulanabilirliği. *Afyon Kocatepe Üniversitesi Sosyal Bilimler Dergisi*, 22(2), 432–443. <https://doi.org/10.32709/AKUSOSBIL.482305>
- Tabachnick, B. G., & Fidell, L. S. (2013). *Using Multivariate Statistics* (Sixth Ed.). Pearson.
- Tamer Gencer, Z., Daşlı, Y. & Biçer, E. B. (2019). Sağlık iletişimde yeni yaklaşımlar: Dijital medya kullanımı. *Selçuk Üniversitesi Sosyal Bilimler Meslek Yüksekokulu Dergisi*, 22(1), 42–52.
- Temel, K. & Akıncı, F. (2016). Sağlık hizmetleri pazarlamasında reklam ve sosyal medyanın rolü. *Hastane Öncesi Dergisi*, 1(2), 27–37.
- Tosyalı, H. & Sütçü, C. S. (2016). Sağlık iletişimde sosyal medya kullanımının bireyler üzerindeki etkileri. *Maltepe Üniversitesi İletişim Fakültesi Dergisi*, 3(2), 3-22.
- Tüfekci, N., İnce, O., & Tüfekci, Ö. (2016). Isparta'daki Özel hastanelerin marka stratejilerini belirleyen faktörlere yönelik bir araştırma. *Süleyman Demirel Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 21(1), 321–338.
- Vardarlıer, P. & Öztürk, C. (2020). Sağlık iletişimde sosyal medya kullanımının rolü. *Sosyolojik Düşün*, 5(1), 1-18.
- Yazıcıoğlu, F. & Erdoğan, S. (2004). *SPSS applied scientific research methods*. Detay Publishing.
- Zengin, Y., Divanoğlu, S. U. & Sağlam, Ş. (2022). Sosyal medya, algılanan kalite ve ağızdan ağıza iletişimin hastane marka imajıyla ilişkisi. *Pamukkale Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 49, 23–41.
- Zhang, T., Yan, X., Wang, W. Y. C. & Chen, Q. (2021). Unveiling physicians' personal branding strategies in online healthcare service platforms. *Technological Forecasting and Social Change*, 171, 120964. <https://doi.org/10.1016/J.TECHFORE.2021.120964>