



Original research

Factors affecting nursing and midwifery students' attitudes toward social media

Banu Terzi^{a,*}, Seçil Bulut^b, Nurten Kaya^c^a Amasya University, Faculty of Health Sciences, Amasya University İpekköy Yerleşkesi Shell karşıtı İpekköy, Amasya, Turkey^b Istanbul Lütüfiye Nuri Burat State Hospital, 50. Yıl Mahallesi 2107 Sokak No:4, Sultangazi, Istanbul, Turkey^c Istanbul University, Health Sciences Faculty, Demirkapı Cad. KarabalSk. Bakırköy Ruh ve Sinir Hastalıkları Hastanesi Bahçesi içi 34740 Bakırköy, Istanbul, Turkey

ARTICLE INFO

This study was presented as a poster presentation at I.International IV.National Individual Development Days, in 13–16 April 2017, Izmir, Turkey

Keywords:

Attitude
Midwifery students
Nursing students
Social media

ABSTRACT

With the advancement of technology, social media use increases day by day, especially among university students. This descriptive and correlational research was conducted with the aim of investigating attitudes of nursing and midwifery students towards social media in terms of certain variables. The population of the research comprised students studying at the nursing and midwifery department of a health college (N = 336), and the sample of the research constituted students who were chosen using accidental sampling from the population (n = 254). A Student Information Form and the Social Media Attitude Scale were used for data collection. It was identified that 73% of the students studied nursing and 64.2% used social media for various reasons. The averages scores for total score, social competence, need for sharing, relationship with the teachers, and social isolation dimensions of Social Media Attitude Scale were found as 72.19 ± 10.92 (23–115), 14.17 ± 4.87 (6–30), 27.65 ± 6.08 (8–40), 7.50 ± 3.20 (3–15), and 13.14 ± 5.01 (6–30), respectively. It was observed that nursing and midwifery students had positive attitudes towards social media. Furthermore, although the personal characteristics of students do not affect their attitudes towards social media, the features of social media have a statistically significant effect on students attitudes towards social media.

1. Introduction

Fast-moving information technology and communication instruments have become essential for people who need to access and use information effectively. The fastest and most practical way of accessing information is undoubtedly the internet. The internet is both a network that connects millions of people all over the world and an environment that connects thousands of social groups (Tektaş, 2014). The internet, the greatest supporter of modern communication systems, emerged in the 1970s and developed rapidly, especially after the 1990s, and has reached a point where it arouses great interest for people from all strata and all ages (Akıncı Vural and Bat, 2010; Willoughby, 2018).

The internet allows people to communicate faster and more effectively, observe instantaneous changes in life, and share personal experiences and opinions. Social media, which is an important element of the internet, plays a large part in communication and information sharing (Arslan and Kırık, 2013; Sarsar et al., 2015).

Social media is a common term used for online tools, services, websites, and applications that allow people to share information,

opinions, and interests (Dal and Dal, 2014; Öztürk and Talas, 2015; Solmaz et al., 2013). Furthermore, social media is a broad field of internet, which involves forums, content blogs (Tumblr, Blogger), microblogs (Twitter), social network sites (Facebook, MySpace, Google Plus, Twitter), professional networks (LinkedIn), and sites where extraordinary works are shared (YouTube, Flickr), cooperative websites (Wikipedia), virtual reality and gaming websites (HumanSim, Second Life) (Aslanyürek et al., 2015; Dal and Dal, 2014; Hamm et al., 2013; Moorhead et al., 2013; Otrar and Argın, 2014; Oz, 2014; Ventola, 2014).

Social media is becoming ever more widespread around the world and it eases people's lives in many ways (Koç and Tatlı, 2017). However, it has a few negative effects such as deteriorating relationships and causing a loss of time. Furthermore, sharing informal, deficient, unaccredited information leads to the spread of non-evidence-based information, and security and ethical problems may occur due to the display of personal identity (Kilis et al., 2014; Ross, 2012; Ventola, 2014).

Healthcare systems develop in parallel with the technological

* Corresponding author.

E-mail addresses: copurbanu@hotmail.com, banu.terzi@amasya.edu.tr (B. Terzi), secilbulut47@gmail.com (S. Bulut), nurka@istanbul.edu.tr, nurtenkaya66@gmail.com, nurtenkaya66@hotmail.com (N. Kaya).

<https://doi.org/10.1016/j.nepr.2019.02.012>

Received 3 July 2018; Received in revised form 17 February 2019; Accepted 17 February 2019

1471-5953/© 2019 Elsevier Ltd. All rights reserved.

developments, which gives rise to applications such as tele-medicine (Işık and Güler, 2010). Tele-medicine, a subbranch of tele-health meaning ‘distant healing,’ mostly involves treatment and patient follow-up (World Health Organization, 2010). Tele-health provides healthcare services to people who live far from health institutions (Dasgupta and Deb, 2008). Social media helps people who are in need for healthcare to receive care services through the internet and various websites (Ventola, 2014). Individuals who become literate in health can make informed decisions about their health and benefit from web-based healthcare education (Kendir Çopurlar and Kartal, 2016).

Providing healthcare services through internet and social media sites will gradually become widespread. The majority of students who study health-related subjects use social media platforms in various ways (Jones et al., 2016; Price et al., 2018; Usher et al., 2014). Most nursing students consider themselves competent enough to discuss nursing education on social media. Furthermore, use of social media for nursing education is still at a very early stage (Jackson et al., 2018). Social media has become prominent for nursing education in recent years. Although there are various warnings about the use of social media, social media might assist nursing students to develop cognitive and writing skills and encourage their occupational commitment (Jackson et al., 2018). However, there are only a limited number of examples for social media use for nursing education (Jackson et al., 2018). The number of publications on the attitudes of nursing students towards social media is also limited (Al-Shdayfat, 2018). Thus, the attitudes of nursing and midwifery students, who are important members of the healthcare team, towards social media should be investigated. In the literature, there are studies investigating teenagers' (Alican and Saban, 2013; Otrar and Argın, 2014, 2015) and university students' social media habits (Akin et al., 2015) and attitudes towards social media (Acar, 2013; Aslanyürek et al., 2015; Bedir, 2016; Erdem Aydın, 2016; Tektaş, 2014). However, no studies investigating the attitudes of nursing and midwifery students towards social media were found. From this point, this study was conducted with the aim of evaluating the attitudes of nursing and midwifery students towards social media.

The questions below were answered in line with this objective:

- What are the personal and social media habits of the students?
- How are the attitudes of the students towards social media?
- Are there any statistically significant differences between the students' personal and social media habits and the social media attitude scale?

2. Methods

2.1. Research type

The research is a descriptive and correlational research.

2.2. Research population and sample

The population of the research comprised nursing and midwifery students studying at the health college of a public university in north of Turkey (N = 336). In May 2017, when the research was conducted, a total of 253 students were studying in the nursing department and a total of 83 students were studying in the midwifery department. It was aimed to reach the entire population without performing any sample calculations. The criteria for involvement in the research were being a student in the nursing or midwifery departments and being voluntary to participate in the research. The research was completed with the students who were present at the university on the day the data were collected (n = 254; 76% of the population). According to the population and sample number, the results of the present study reflected a 3.04% error rate and 0.95 confidence interval.

2.3. Data collection tools

A Student Information Form and the Social Media Attitude Scale were used for data collection.

2.3.1. Student Information Form

The form consisted of a total of 15 items questioning socio-demographic characteristics such as age, sex, department, academic year, and other factors such as frequency of use of social media platforms (the items were sorted as Facebook, LinkedIn, Twitter, Foursquare [Swarm], Instagram, Snapchat and others, and a five-point Likert scale was used as “Never,” “Rarely,” “Sometimes,” “Frequently,” and “Always”), the purpose of using social media platforms, time allocated to social media, and the device used to access social media.

2.3.2. Social media attitude scale (SMAS)

The scale, developed by Otrar and Argın in 2015, consists of four dimensions and 23 items. The dimensions of the scale are Social Competence (6 items), Need for Sharing (8 items), Relationship with Teachers (3 items), and Social Isolation (6 items). The dimension scores of the scale are calculated without any alterations. However, because all the items comprising the social isolation dimension are reversed items, items for this dimension are reverse coded when calculating the total scores of this dimension (Otrar and Argın, 2015). The scale was developed on youths aged 13–18 years and also used to identify the university students' attitudes toward social media (Aküzüm and Saraçoğlu, 2017). The Cronbach alpha value for the original scale was 0.85. The Alpha value for the SMAS scores obtained from the sample of this study (n = 254) was 0.89.

2.4. Data collection process

Nursing and midwifery students involved in the research were informed about the duration and aim of the research in line with the voluntary basis, and data were collected using questionnaires. Questionnaire forms were delivered to the students, who were asked to fill in the form in 20 min, after which the forms were collected in May 2017.

2.5. Ethical considerations

It is obligatory to follow scientific and universal principles while conducting research. The Helsinki Declaration was abided by throughout the study. Consent was obtained from the Dean's office and the head of the department from which the research data were obtained, and the students were informed about the purpose and content of the research. Written approval was obtained from the Local Ethics Committee (E.10935). The students were told that their names would not be written on the data collection forms. All students gave written informed consent.

2.6. Data analysis and evaluation

Data obtained from the questionnaire forms were recorded to the database, which was composed using the Statistical Package for the Social Sciences for Windows (SPSS 21.0) package program, and data were analyzed using the same program. For the data analysis, ordinal variables were evaluated using arithmetic mean and standard deviation, and minimum, maximum, and nominal variables were evaluated using frequency and percentage. Pearson's correlation test was used to determine the relationship between ordinal variables, the *t*-test was used to determine the difference between the means of two groups, one-way analysis of variance (ANOVA) was used to determine the difference between more than two groups, and Tukey's honestly significant difference (HSD) test was used for further analysis when a statistically significant difference was present. The level of significance was

Table 1
Distribution of the Social Media Attitude Scale scores according to the personal and social media habits of students (n = 254).

Personal and Social Media Habits Characteristics	n (%)	Social competence Mean ± SD	Need for sharing Mean ± SD	Relationship with teachers Mean ± SD	Social isolation Mean ± SD	Total Mean ± SD
Age groups (year)						
18–19	84 (33.1)	14.57 ± 4.85	28.71 ± 5.60	7.49 ± 3.08	13.75 ± 4.63	73.02 ± 9.58
20–21	118 (46.5)	13.64 ± 4.86	27.41 ± 6.40	7.37 ± 3.33	12.54 ± 5.00	71.87 ± 12.24
22 and ↑	52 (20.5)	14.71 ± 4.88	26.50 ± 5.89	7.83 ± 3.10	13.50 ± 5.54	71.54 ± 9.85
		F = 1.323 ^a p = 0.268	F = 2.337 ^a p = 0.099	F = 0.364 ^a p = 0.695	F = 1.605 ^a p = 0.203	F = 0.385 ^a p = 0.681
Age (Mean ± SD)	20.41 ± 1.90	r = -0.007 ^b	r = -0.100 ^b	r = 0.066 ^b	r = -0.031 ^b	r = -0.037 ^b
Min.-Max.	18–30	p = 0.911	p = 0.113	p = 0.292	p = 0.624	p = 0.553
Sex						
Female	210 (82.7)	13.88 ± 4.66	27.96 ± 6.01	7.51 ± 3.18	13.13 ± 4.97	72.22 ± 10.63
Male	44 (17.3)	15.55 ± 5.61	26.18 ± 6.25	7.45 ± 3.29	13.18 ± 5.27	72.00 ± 12.37
		t = -1.844 ^c p = 0.070	t = 1.730 ^c p = 0.089	t = 0.110 ^c p = 0.913	t = -0.062 ^c p = 0.951	t = 0.112 ^c p = 0.911
Marital status						
Married	4 (1.6)	14.50 ± 4.51	26.25 ± 5.74	8.00 ± 2.83	11.75 ± 5.25	73.00 ± 11.58
Single/widow/divorced	250 (98.4)	14.16 ± 4.88	27.68 ± 6.09	7.50 ± 3.21	13.16 ± 5.01	72.17 ± 10.94
		t = 0.138 ^c p = 0.890	t = -0.465 ^c p = 0.642	t = 0.312 ^c p = 0.755	t = -0.558 ^c p = 0.577	t = 0.150 ^c p = 0.881
Department						
Nursing	183 (72.0)	14.42 ± 5.00	27.56 ± 6.18	7.44 ± 3.29	13.11 ± 5.03	72.31 ± 11.25
Midwifery	71 (28.0)	13.51 ± 4.48	27.90 ± 5.85	7.66 ± 2.97	13.20 ± 4.98	71.87 ± 10.09
		t = 1.345 ^c p = 0.180	t = -0.404 ^c p = 0.686	t = -0.490 ^c p = 0.624	t = -0.117 ^c p = 0.907	t = 0.283 ^c p = 0.778
Year at school						
1st year	60 (23.6)	13.50 ± 4.63	27.90 ± 5.89	7.28 ± 3.13	13.43 ± 4.87	71.25 ± 9.89
2nd year	71 (28.0)	15.27 ± 5.15	28.75 ± 5.76	7.75 ± 3.25	13.63 ± 5.24	74.13 ± 11.49
3rd year	73 (28.7)	13.86 ± 4.83	27.45 ± 5.71	7.18 ± 3.23	12.67 ± 4.70	71.82 ± 10.57
4th year	50 (19.7)	13.84 ± 4.65	26.10 ± 7.02	7.90 ± 3.18	12.76 ± 5.33	71.08 ± 11.73
		F = 1.773 ^a p = 0.153	F = 1.935 ^a p = 0.124	F = 0.738 ^a p = 0.530	F = 0.605 ^a p = 0.612	F = 1.093 ^a p = 0.353
Facebook frequency of use						
Never (a)	67 (26.4)	12.91 ± 4.64 (a < e)	26.85 ± 6.59	7.13 ± 2.95	13.34 ± 4.79	69.55 ± 12.02
Rarely (b)	47 (18.5)	13.81 ± 4.94	27.21 ± 6.30	6.72 ± 2.98	12.62 ± 4.42	71.13 ± 9.97
Sometimes (c)	55 (21.7)	13.73 ± 4.59	27.49 ± 6.34	7.75 ± 3.27	12.35 ± 5.68	72.62 ± 10.09
Often (d)	56 (22.0)	15.23 ± 5.04	28.32 ± 5.77	7.75 ± 3.54	13.34 ± 5.00	73.96 ± 11.04
Always (e)	29 (11.4)	16.41 ± 4.54 (e > a)	29.24 ± 4.26	8.69 ± 2.99	14.62 ± 5.00	75.72 ± 10.00
		F = 3.658 ^a p = 0.006	F = 1.028 ^a p = 0.393	F = 2.122 ^a p = 0.079	F = 1.161 ^a p = 0.329	F = 2.283 ^a p = 0.061
Mean. ± SD	2.74 ± 1.36	r = 0.231 ^b p = 0.000	r = 0.116 ^b p = 0.065	r = 0.149 ^b p = 0.017	r = 0.036 ^b p = 0.566	r = 0.175 ^b p = 0.005
Min.-Max.	1–5					
LinkedIn frequency of use						
Never	250 (98.4)	14.08 ± 4.86	27.54 ± 6.04	7.42 ± 3.14	13.09 ± 5.02	71.95 ± 10.82
Rarely	1 (0.4)	20.00 ± -	30.00 ± -	11.00 ± -	20.00 ± -	77.00 ± -
Sometimes	1 (0.4)	18.00 ± -	37.00 ± -	14.00 ± -	16.00 ± -	89.00 ± -
Often	-	-	-	-	-	-
Always	2 (0.8)	19.50 ± 3.54	36.00 ± 5.66	13.50 ± 2.12	14.50 ± 3.54	90.50 ± 7.78
		F = 1.521 ^a p = 0.210	F = 2.153 ^a p = 0.094	F = 4.353 ^a p = 0.005	F = 0.790 ^a p = 0.500	F = 2.827 p = 0.039
Twitter frequency of use						
Never	164 (64.6)	13.76 ± 4.95	27.05 ± 6.56	7.33 ± 3.15	12.94 ± 5.02	71.20 ± 11.73
Rarely	22 (8.7)	14.14 ± 3.91	28.27 ± 4.63	7.64 ± 3.16	12.86 ± 4.42	73.18 ± 9.76
Sometimes	34 (13.4)	15.26 ± 4.93	29.50 ± 5.40	8.03 ± 3.38	14.91 ± 5.50	73.88 ± 9.38
Often	19 (7.5)	15.84 ± 5.08	29.37 ± 3.93	7.89 ± 2.96	12.63 ± 4.50	76.47 ± 8.61
Always	15 (5.9)	14.07 ± 4.50	26.93 ± 5.32	7.53 ± 3.78	12.33 ± 4.88	72.20 ± 8.03
		F = 1.296 ^a p = 0.272	F = 1.688 ^a p = 0.153	F = 0.429 ^a p = 0.787	F = 1.299 ^a p = 0.271	F = 1.323 ^a p = 0.262
Swarm frequency of use						
Never (a)	181 (71.3)	13.65 ± 4.68(a < c; a < e)	27.06 ± 6.27	7.36 ± 3.25	13.20 ± 5.13	70.88 ± 11.21(a > c; a > e)
Rarely (b)	25 (9.8)		28.84 ± 4.65	7.84 ± 2.98	12.80 ± 4.21	
Sometimes (c)	21 (8.3)	14.00 ± 4.55(b < e)	29.95 ± 5.00	8.38 ± 3.06	13.90 ± 5.53	73.88 ± 9.12
Often (d)	16 (6.3)	17.29 ± 4.88(c > d)	27.00 ± 6.73	6.38 ± 2.66	11.06 ± 4.30	77.71 ± 8.73(c > a)
Always (e)	11 (4.3)	12.69 ± 4.63(d < e)	31.27 ± 4.69	9.00 ± 3.26	14.45 ± 4.27	71.00 ± 9.92
		19.18 ± 4.42(e > a; e > b; e > d)				81.00 ± 8.09(e > a)
		F = 6.480 ^a r = 0.000	F = 2.498 ^a r = 0.043	F = 1.670 ^a r = 0.157	F = 1.036 ^a r = 0.389	F = 4.182 ^a r = 0.003
Instagram frequency of use						

(continued on next page)

Table 1 (continued)

Personal and Social Media Habits Characteristics	n (%)	Social competence Mean ± SD	Need for sharing Mean ± SD	Relationship with teachers Mean ± SD	Social isolation Mean ± SD	Total Mean ± SD
Never (a)	33 (13.0)	11.73 ± 5.83 (a < e)	21.61 ± 7.47(a < d); (a < e)	6.48 ± 3.45	11.39 ± 5.14	64.42 ± 14.61(a < d; a < e)
Rarely (b)	9 (3.5)	11.44 ± 2.79(b < e)	22.78 ± 5.45(b < e)	7.22 ± 3.03	10.78 ± 3.73	66.67 ± 9.12(b < e)
Sometimes (c)	22 (8.7)	13.82 ± 4.51	25.41 ± 5.52(c < e)	6.86 ± 2.70	14.05 ± 5.54	68.05 ± 9.48 (c < e)
Often (d)	80 (31.5)	13.06 ± 4.10(d < e)	27.41 ± 5.21 (d < e)	7.50 ± 2.89	12.80 ± 4.48	71.18 ± 9.92(d > a; d < e)
Always (e)	110 (43.3)	15.99 ± 4.64(e > a; e > b; e > d)	30.49 ± 4.41(e > a; e > b; e > c; e > d)	7.96 ± 3.38	13.92 ± 5.17	76.53 ± 8.69(e > a; e > b; e > c; e > d)
		F = 8.632^a p = 0.000	F = 21.769^a p = 0.000	F = 1.664 ^a p = 0.159	F = 2.497^a p = 0.043	F = 11.755^a p = 0.000
Snapchat frequency of use						
Never (a)	131 (51.6)	13.31 ± 5.06	26.02 ± 6.95(a < c; a < d; a < e)	7.37 ± 3.35	12.45 ± 4.88	70.24 ± 12.54
Rarely (b)	34 (13.4)	14.74 ± 4.26	28.44 ± 4.43	7.38 ± 2.88	13.71 ± 4.36	72.85 ± 8.04
Sometimes (c)	30 (11.8)	14.63 ± 4.81	29.77 ± 4.37 (c > a)	7.73 ± 3.15	14.67 ± 5.27	73.47 ± 9.03
Often (d)	23 (9.1)	15.57 ± 3.96	29.74 ± 3.61(d > a)	7.91 ± 2.75	13.65 ± 5.83	75.57 ± 7.25
Always (e)	36 (14.2)	15.47 ± 4.87	29.78 ± 4.82 (e > a)	7.67 ± 3.31	13.50 ± 5.12	75.42 ± 9.09
		F = 2.386 ^a p = 0.052	F = 5.581^a p = 0.000	F = 0.226 ^a p = 0.923	F = 1.546 ^a p = 0.189	F = 2.579 ^a p = 0.038
WhatsApp frequency of use						
Never (a)	76 (29.9)	13.79 ± 4.59	27.86 ± 6.32	7.71 ± 3.06	13.50 ± 5.25	71.86 ± 11.86
Rarely (b)	14 (5.5)	12.29 ± 3.77	26.27 ± 6.27 (c < e)	7.71 ± 3.17	13.00 ± 4.21	66.57 ± 8.86
Sometimes (c)	49 (19.3)	13.41 ± 4.60 (c < e)	27.69 ± 5.57	7.20 ± 3.21	11.31 ± 4.47 (c < e)	71.57 ± 10.16
Often (d)	62 (24.4)	14.06 ± 4.69	29.68 ± 5.34(e > b; e > c)	7.21 ± 3.14	13.29 ± 4.48	71.68 ± 10.63
Always (e)	53 (20.9)	16.02 ± 5.53 (e > c)	28.33 ± 5.74(e > a; e > d)	7.77 ± 3.49	14.17 ± 5.59 (e > c)	75.30 ± 10.54
		F = 2.950^a p = 0.021	F = 3.880^a p = 0.004	F = 0.424 ^a p = 0.791	F = 2.368 ^a p = 0.053	F = 2.130 ^a p = 0.078
Using purposes of social media platforms						
Education (a)	3 (1.2)	9.67 ± 1.53	20.00 ± 1.00(a < c; a < e)	6.00 ± 3.00	11.67 ± 5.51	60.00 ± 1.00 (a < e)
News chasing (b)	14 (5.5)	12.57 ± 3.63	25.50 ± 8.31(b > d)	7.50 ± 3.35	11.64 ± 4.29 (b < c)	69.93 ± 12.48
Entertainment (c)	60 (23.6)	14.70 ± 5.04 (c > d)	28.08 ± 5.26 (c > a; c > d)	6.90 ± 2.90	14.90 ± 4.90(c > b; c > d; c > e)	70.78 ± 9.72(c > d)
Chatting (d)	12 (4.7)	10.08 ± 5.09 (d < c; d < e)	20.58 ± 6.56(d < b; d < c; d < e)	6.42 ± 2.71	10.83 ± 4.95 (d < c)	62.25 ± 10.64 (d < c; d < e)
Several (e)	165 (65.0)	14.48 ± 4.75 (e > d)	28.33 ± 5.74(e > a; e > d)	7.83 ± 3.30	12.82 ± 4.97 (e < c)	73.83 ± 10.78 (e > a; e > d)
		F = 3.633^a p = 0.007	F = 6.860^a p = 0.000	F = 1.491 p = 0.205	F = 3.139^a p = 0.015	F = 5.052^a p = 0.001
Status of getting help to use social media platforms						
Yes	19 (7.5)	15.74 ± 4.32	28.95 ± 6.03	9.16 ± 2.54	13.42 ± 3.73	76.42 ± 9.49
No	235 (92.5)	14.04 ± 4.89	27.55 ± 6.08	7.37 ± 3.21	13.11 ± 5.10	71.84 ± 10.98
		t = 1.467 ^c p = 0.144	t = 0.964 ^c p = 0.336	t = 2.367^c p = 0.019	t = 0.256 ^c p = 0.798	t = 1.765 ^c p = 0.079
The time that social media allocates daily (hour)						
0–1 h (a)	55 (21.7)	13.35 ± 5.15(a < d)	25.49 ± 7.15(a < c)	7.45 ± 3.48	11.67 ± 4.87 (a < c)	70.62 ± 13.96
2–4 h (b)	106 (41.7)	13.75 ± 4.72(b < d)	27.44 ± 5.94	7.49 ± 3.20	12.63 ± 4.65(b < c)	72.06 ± 10.20
4–6 h (c)	67 (26.4)	14.48 ± 4.54	29.28 ± 5.01(c > a)	7.85 ± 3.00	14.76 ± 4.99(c > a; c > b)	72.85 ± 9.49
6–10 h (d)	26 (10.2)	16.77 ± 4.99(d > a; d > b)	28.88 ± 5.46	6.77 ± 3.06	14.12 ± 5.66	74.31 ± 10.00
		F = 3.444^a p = 0.017	F = 4.504^a p = 0.004	F = 0.724 ^a p = 0.539	F = 4.814^a p = 0.003	F = 0.790 ^a p = 0.500
Confirmation of the trustworthiness of used the social media platforms						
Yes	128 (50.4)	14.48 ± 4.73	28.37 ± 5.44	7.95 ± 3.17	12.27 ± 4.48	74.52 ± 9.99
No	(49.6)	13.85 ± 5.00	26.93 ± 6.61	7.06 ± 3.18	14.02 ± 5.36	69.81 ± 11.34
		t = 1.028 ^c p = 0.305	t = 1.896 ^c p = 0.059	t = 2.236^c p = 0.026	t = -2.836^c p = 0.005	t = 3.515^c p = 0.001
Status of influence on the life of the employee in social media						
Yes	130 (51.2)	15.04 ± 4.56	28.85 ± 5.03	7.58 ± 3.24	15.16 ± 4.90	72.31 ± 9.17
No	124 (48.8)	13.25 ± 5.02	26.40 ± 6.81	7.43 ± 3.16	11.02 ± 4.19	72.06 ± 12.54
		t = 2.973^c p = 0.003	t = 3.261^c p = 0.001	t = 0.372 ^c p = 0.710	t = 7.231^c p = 0.000	t = 0.182 ^c p = 0.856
Social media review process						
Elegant (a)	24 (9.4)	17.50 ± 5.08(a > b; a > c)	30.21 ± 5.08(a > c)	8.04 ± 3.44	13.79 ± 5.36	77.96 ± 10.21(a > c)
Good (b)	199 (78.3)	13.94 ± 4.60(b < a)	27.88 ± 5.76(b > c)	7.43 ± 3.18	12.62 ± 4.73(b < c; b < d)	72.62 ± 9.94(b > c)
Bad (c)	24 (9.4)	12.42 ± 4.06(c < a)	22.92 ± 6.76(c < a; c < b)	7.46 ± 2.77	15.46 ± 5.51(c > b)	63.33 ± 11.86(c < a; c < b)
Terrible (d)	7 (2.8)	15.14 ± 8.80	28.71 ± 8.42	8.00 ± 4.47	17.57 ± 6.24(d > b)	70.29 ± 19.33
		F = 5.284^a p = 0.002	F = 6.883^a p = 0.000	F = 0.320 ^a p = 0.811	F = 4.568^a p = 0.004	F = 8.333^a p = 0.000
The most common connect place for social media platforms						

(continued on next page)

Table 1 (continued)

Personal and Social Media Habits Characteristics	n (%)	Social competence Mean ± SD	Need for sharing Mean ± SD	Relationship with teachers Mean ± SD	Social isolation Mean ± SD	Total Mean ± SD
Home	90 (35.4)	14.57 ± 5.40	27.22 ± 6.67	7.56 ± 3.07	12.58 ± 5.09	72.77 ± 11.92
School	35 (13.8)	13.86 ± 5.21	27.91 ± 6.16	7.54 ± 3.31	13.40 ± 5.63	71.91 ± 11.75
Dormitory	128 (50.4)	13.89 ± 4.30	27.88 ± 5.66	7.45 ± 3.28	13.39 ± 4.73	71.82 ± 10.03
Internet cafe	1 (0.4)	24.00 ± .	29.00 ± .	9.00 ± .	22.00 ± .	76.00 ± .
		F = 1.765 ^a p = 0.154	F = 0.243 ^b p = 0.866	F = 0.096 ^a p = 0.962	F = 1.570 ^a p = 0.197	F = 0.179 ^b p = 0.911
The tool used most often to connect to social media platforms						
Desktop computer (a)	4 (1.6)	15.25 ± 7.46	23.50 ± 10.34	8.00 ± 3.46	20.00 ± 7.07(a > b; a > c)	62.75 ± 25.29
Notebook (b)	65 (25.6)	14.25 ± 4.70	27.83 ± 6.92	7.15 ± 3.38	12.22 ± 4.59(b < a)	73.02 ± 11.57
Mobile devices (mobile phone. iphone. tablet) c	185 (72.8)	14.11 ± 4.89	27.68 ± 5.66	7.62 ± 3.13	13.31 ± 5.00 (c < a)	72.10 ± 10.24
		F = 0.118 ^a p = 0.889	F = 0.963 ^b p = 0.383	F = 0.551 ^a p = 0.577	F = 5.133 ^b p = 0.007	F = 0.1695 ^a p = 0.186

Explanation: (a). (b). (c). (d) ... significations are used to indicate the groups causing the difference.

^a Oneway Anova- Tukey HSD in advanced analyses.

^b Pearson Correlation.

^c Independent Samples Test.

accepted as 0.05.

3. Results

The results of the research were approached under three headings:

3.1. Personal and social media habits of the students

The average of age of the students was 20.41 ± 1.90 (Min = 18, Max = 30), years. Two hundred ten (82.7%) were female, 183 (72%) were nursing students, and 73 (28.7%) were in their third year of nursing studies (Table 1). When the social media habits of the students were examined, it was found that they used Instagram the most (average score 3.89 ± 1.35; Min. = 1, Max. = 5), 64.2% (n = 163) used social media platforms for various reasons, 92.5% (n = 106) did not get help when using social media, 41.7% (n = 106) spent 2–4 h on social media per day, 50.4% (n = 128) confirmed the security of the social media platforms that they used and used social media mostly in the dormitories, and 72.8% (n = 185) mostly used mobile devices to connect to social media (Table 1).

3.2. Attitudes of students towards social media

When the SMAS dimension scores of the students were examined, it was identified that the mean score of the Social Competence dimension was 14.17 ± 4.87 (Min = 6, Max = 30), the mean score of Need for Sharing was 27.65 ± 6.08 (Min = 8, Max = 40), the mean score of Relationship with Teachers was 7.50 ± 3.20 (Min = 3, Max = 15), the mean score of Social Isolation was 13.14 ± 5.01 (Min = 6, Max = 28), and the mean total score of SMAS was 72.19 ± 10.92 (Min = 25, Max = 107) (Table 2).

When the correlation between the dimension and total scores of SMAS were examined, it was identified that there was a statistically

Table 2 Distribution of Social Media Attitude Scale Scores of students (n = 254).

Subscales	Potential Range	Minimum	Maximum	Mean ± SD
Social competence	6–30	6.00	30.00	14.17 ± 4.87
Need for sharing	8–40	8.00	40.00	27.65 ± 6.08
Relationship with the teachers	3–15	3.00	15.00	7.50 ± 3.20
Social isolation	6–30	6.00	28.00	13.14 ± 5.01
Total	23–115	25.00	107.00	72.19 ± 10.92

significant positive relationship between Social Competence and Need for Sharing, Relationship with Teachers, Social Isolation, and total score; between Need for Sharing and Relationship with Teachers and total score; and between Relationship with Teachers and Social Isolation and total score (Table 3).

3.3. Comparison of students' personal and social media habits and attitudes towards social media

When the personal characteristics of the nursing and midwifery students and dimensions of SMAS were compared, no statistically significant difference was present between age, sex, marital status, department, academic year, and dimension and total scores of SMAS (p > 0.05, Table 1).

When the social media habits of nursing and midwifery students and dimensions of SMAS were compared, it was found that there was a statistically significant difference between the frequency of use of Facebook and the Social Competence dimension of SMAS; between the frequency of use of LinkedIn and the total score and Social Competence; between the frequency of use of Swarm and the total score and Relationship with Teachers; between the frequency of use of Instagram and the total score, Social Competence, Need for Sharing, and Social Isolation dimensions of SMAS; between the frequency of use of Snapchat and Need for Sharing; and between the frequency of use of WhatsApp and Social Competence and Need for Sharing dimensions. The groups causing the differences are shown in Table 1 (p < 0.05).

A statistically significant difference was present between the students' purpose of using social media platforms and total scores, Social Competence, Need for Sharing and Social Isolation dimensions of

Table 3 Correlation of Social Media Attitude Scale dimension and total scores of students (n = 254).

Social Media Attitude Subscales		Need for sharing	Relationship with the teachers	Social isolation	Total
Social Competence	r ^a	0.542**	0.390**	0.380**	0.687**
	p	< 0.001	< 0.001	< 0.001	< 0.001
Need for sharing	r ^a	1	0.412**	0.162**	0.844**
	p		< 0.001	0.010	< 0.001
Relationship with the teachers	r ^a		1	0.264**	0.575**
	p			< 0.001	< 0.001
Social isolation	r ^a			1	-0.122
	p				0.052

^a Pearson Correlation.

SMAS. The groups causing the differences are shown in Table 1 ($p < 0.05$).

The Relationship with Teachers dimension scores of the students who received help by using social media platforms were found statistically higher than those who do not get help ($p < 0.05$, Table 1).

A statistically significant difference was found between the time spent daily on social media and Social Competence, Need for Sharing and Social Isolation dimensions of SMAS. The groups causing the difference are shown in Table 1 ($p < 0.05$). It was detected that SMAS total scores ($p \leq 0.001$) and Relationship with Teachers ($p < 0.01$) dimension scores of the students who confirmed the security of the social media platforms they used were statistically higher than students who do not confirm security, and Social Isolation dimension scores of the students who confirmed security were found statistically lower than in students who did not confirm security ($p < 0.05$, Table 1).

The Social Competence ($p < 0.01$), Need for Sharing ($p \leq 0.001$), and Social Isolation ($p \leq 0.001$) dimension scores of students who stated that the time they spent on social media affected their lives were found statistically higher than those who claimed it had no effects ($p < 0.05$, Table 1).

For the students who evaluated social media as “Very good,” “Good,” “Bad,” and “Very bad,” it was detected that there was a statistically significant difference between this evaluation process and the total score ($p < 0.001$), Social Competence ($p < 0.01$), Need for Sharing ($p < 0.001$) and Social Isolation ($p < 0.01$) dimension scores of SMAS. The groups causing the differences are shown in Table 1 ($p < 0.05$).

The Social Isolation dimension scores of students who stated that they mostly used desktop computers to use social media platforms were found statistically higher than students who mostly used laptops or mobile devices ($p < 0.01$, Table 1).

4. Discussion

In parallel with technological developments, social media platforms are becoming widespread in healthcare services and they are used for medical applications, medical inspection follow-ups, patient treatment and follow-up, patient education, and nursing-midwifery education (Chippis et al., 2015; Hamm et al., 2014; Moorhead et al., 2013). For this reason, attitudes of nursing and midwifery students, who provide healthcare services, towards social media should be identified and regulations should be made to prepare these students to effectively use social media platforms in healthcare. In this direction, attitudes of nursing and midwifery students towards social media were investigated in terms of certain variables.

4.1. Discussion on the personal and social media habits of students

Students within the scope of the research used Instagram the most. Social media tools are ranked by frequency of use as Facebook (99%) (Otrar and Argın, 2015), Twitter (5.8%) and Instagram (1.8%) (Kılıç et al., 2017). Instagram takes last place according to this ranking. In other studies that investigated the frequency of use of social media among nursing students, it was identified that Facebook was the most frequently used social media platform (Duke et al., 2017; Price et al., 2018); Facebook is popular among students, especially for formal and informal education (Duke et al., 2017). In similar studies conducted in our country on students studying at various departments, it was identified that Facebook was the most frequently used social media platform (Dal and Dal, 2014; Solmaz et al., 2013).

Facebook offers its users the opportunity to make new friendships, share photos and opinions, and share personal information for free (Tower et al., 2014). Besides, it is emphasized that the frequency of use of Facebook is related to extrovert personality and those people can easily share their photos and personal information (Dal and Dal, 2014). On the other hand, Facebook has the potential to improve students'

learning, both in and out of class, and students can share personal and class-related educational posts via Facebook (Barnable et al., 2018). In our study, in conflict with the literature, it was found that Instagram was the most frequently used social media platform. This may be caused by the decrease in the number of Facebook users due to scandals claiming that Facebook shares personal data.

Social media is being used for various purposes from education to having fun (Al-Shdayfat, 2018; Solmaz et al., 2013). Following friends (35.8%), staying up to date (17.8%), sharing posts (12.5%), spending time (7.0%) are among the purposes of using social media (Aküzüm and Saraçoğlu, 2017; Otrar and Argın, 2014; Peker and Çukadar, 2016; Şişman Eren, 2014).

In a few studies, it was found that among students, social media was mostly used for educational purposes and rarely for professional purposes (Al-Shdayfat, 2018); among some students, especially among nursing students, it was mostly used for personal purposes (Duke et al., 2017), health publicity subjects (Englund et al., 2012), organizations for patients and peer support (Jones et al., 2016). In our study, it was identified that students used social media platforms for various purposes.

In our study, 41.7% of the students spent 2–4 h daily on social media. In a study conducted by Duke et al. (2017), it was stated that 35.7% of nursing students used social media 1–2 h per day, and in a study by Al-Shdayfat (2018), nursing students were reported to spend more than 3 h on social media per day. It can be said that university students spend a considerable amount of time on social media.

The students in our study mostly used mobile devices to use social media. This result is similar to the results of other studies in the literature (Dal and Dal, 2014; Işıktas, 2016). The fact that it is easy to carry mobile devices may be the reason for this result. Besides, it is thought that mobile devices will supersede computers in the near future and thus all these operations will be performed on mobile devices. On the other hand, allowing a mutual, intense, and unlimited interaction independent from time and place makes social media irreplaceable (Aküzüm and Saraçoğlu, 2017; Otrar and Argın, 2014; Peker and Çukadar, 2016; Şişman Eren, 2014).

4.2. Discussion on attitudes of students towards social media

When the students' scores on SMAS were ranked in descending order, it was observed that the Need for Sharing dimension had the highest score and Relationship with Teachers had the lowest score. According to the mean total score of SMAS (72.19 ± 10.92), it can be said that students showed a high level of positive attitudes towards social media. Similar to our study, in other studies conducted with different groups of students it was also found that students showed positive attitudes towards social media (Goel et al., 2016; Otrar and Argın, 2014; Ünsal and Vayvay, 2018). It is claimed that social media is an emerging field, especially for nursing applications and the education of nursing students (Duke et al., 2017; Gunberg Ross and Myers, 2017; Price et al., 2018; Tuominen et al., 2014). Humans are social beings and socialization may change over time, the need for interpersonal sharing may increase. Social media offers advantages, especially for young adults, such as fast information sharing, easy access to educational material, and sharing of instant experiences among peers (Goel et al., 2016; Hamm et al., 2013).

Social media allows people to use and develop problem-solving skills by research, questioning and utilizing other people's accumulated knowledge (Bedir, 2016). The low mean scores in Relationship with Teachers may indicate that nursing and midwifery students refrain from communicating with their teachers. In a similar research conducted by Aküzüm and Saraçoğlu (2017), the results for Relationship with Teachers was similar to our study, and the results for Need for Sharing were opposite to those in our study. In a similar study conducted by Otrar and Argın (2014) on teenagers, it is found that the mean scores of the Relationship with Teachers dimension were higher because the students

included in the sample were younger than university students and they desired closer relationships with their teachers. In another study that measured attitudes towards social media in a different way, it was emphasized that nursing students showed a positive attitude towards social media both professionally and academically (Al-Shdayfat, 2018). It is also stated that nursing students give positive responses about the use of social media (Gunberg Ross and Myers, 2017).

4.3. Discussion on students' personal and social media habits and their attitudes towards social media

When the personal characteristics of the nursing and midwifery students and dimensions of SMAS were compared, no statistically significant difference was detected between age, sex, marital status, department, academic year, and the total score and dimensions of SMAS. In similar studies in the literature, differences were reported between sex and certain dimensions of SMAS (Aküzüm and Saraçoğlu, 2017), and in some studies, it was reported that there were no differences between personal characteristics and SMAS (Bulu et al., 2016).

Among the social media platforms used by nursing and midwifery students, statistically significant differences were present between the frequency of use of Facebook and the Social Competence dimension of SMAS; between the frequency of use of LinkedIn and total scores and Relationship with Teachers; between the frequency of use of Swarm and total scores and Relationship with Teachers; between the frequency of use of Instagram and total scores, Social Competence, Need for Sharing, and Social Isolation dimensions; between the frequency of use of Snapchat and Need for Sharing; and between the frequency of use of WhatsApp and Social Competence and Need for Sharing dimensions. It may be considered that students used Facebook to socialize and make personal and educational connections with other people. On the other hand, because LinkedIn is a more professional social media tool, it can be thought that it is only used to contact professors.

Swarm is a location-based social network, which is very popular among young people (Erdoğan et al., 2017). Students who use Swarm can closely follow their acquaintances and friends, and because Swarm is a fast way to contact people (Tutgun Ünal, 2015), they can find the location of their teachers and reach them easily. It can also be said that students socialize through Instagram, using this tool to share more and their attitudes are high-level with this tool. Students who use Instagram very often consequently become socially isolated themselves. Snapchat is an application that allows people to share instant photographs or videos and to add comments on posts. It can only be managed and signed into from a mobile device, and it is preferred by smart phone users (Duggan, 2015). It is observed that due to this feature, students in the study group shared instant posts via this social network. In a study investigating the use of WhatsApp in the field of medicine, it was stated that WhatsApp was preferred because it allowed material sharing, it was easy to use for case studies, diagnosis, treatment, and team work, and because it was fast and secure (Çetinkaya, 2017). In our research, it was observed that students felt competent and could share via WhatsApp because it was easy to use, allowed instant personal and educational sharing, and emotions could be expressed through the use of emojis (Çetinkaya, 2017; Emre et al., 2018).

It was identified that although the students' purposes for using social media platforms differed, their level of attitudes towards social media were increased; the total mean scores of Need for Sharing and Social Isolation dimensions of SMAS were significantly increased. Although social media tools allow instant personal and educational sharing, it may also drag people into loneliness (Savcı and Aysan, 2017). Thus, limiting the time spent on social media is very important. Use of the internet should not be unlimited in places such as schools and dormitories, legal regulations should be made in this regard.

According to the 2014 statistics of a media agency in the United States of America, there are 2485 internet users worldwide and 1856 active social media users and they spend two hours on average per day

on social media. It was reported that people in Argentina spend the most time on social media (4.3 h per day) and people in Japan spend the least time on social media (0.8 h per day). Turkey is above the world average by 2.5 h per day (Dal and Dal, 2014).

In our research, it was identified that students received help when they contacted their teachers via social media. Increasing use of social media by nursing students opened a Pandora's box ethically and started to affect the professionalism of nursing in a cyber world. It was reported that nursing students were not aware of their online behaviors and these behaviors represented the nursing profession in a negative way (Englund et al., 2012). Nursing is a professional discipline and it requires the preservation of professional values for all types of communications. Thus, in terms of cyber civility, nursing students should follow certain policies and guidelines when they communicate with their instructors through social media platforms (De Gagne et al., 2018). Students sometimes cross the limit of ethical principles in their relationships with professors and invade their privacy. This might have a negative effect on the values of the nursing profession.

As the time spent daily on social media by nursing and midwifery students increases, social media attitude scores and Social Competence, Need for Sharing, and Social Isolation dimension scores of SMAS also significantly increase. In other words, as students spend more time on social media, their level of attitude towards social media increases, they become more socially competent, they share more but also become more exposed to social isolation. In the literature, there are a few studies indicating different results (Aküzüm and Saraçoğlu, 2017). In our research, it was observed that students who confirmed the security of the social media platforms showed positive attitudes towards social media and they could easily maintain their relationship with teachers, and by doing so, they protected themselves from social isolation. It should be considered that although social media has benefits, it may also be dangerous when not used safely (Moorhead et al., 2013) and secure social networks should be preferred especially for professional relationships.

In our research, social competence, need for sharing, and social isolation scores were found high for students who stated that the time spent on social media affected their lives. This may be related to the fact that besides having benefits such as building competence and allowing sharing, social media can affect people's lives negatively by causing social isolation (Savcı and Aysan, 2017).

It was identified that although students who evaluated social media as very good developed a positive attitude towards social media, became socially competent, and used social media because of the need for sharing, students who evaluated social media as very bad experienced social isolation. According to this result, it may be thought that students who experienced social isolation evaluated social media as very bad and students who showed a positive attitude towards social media because of its benefits evaluated social media as very good.

It was found that students who used desktop computers the most to use social media experienced more social isolation than those who used laptop computers and mobile devices. Although mobile devices and laptop computers can be used anywhere, it is not possible for desktop computers. Thus, students who used desktop computers to use social media may have social limitations. It could also be thought that students who used desktop computers to use social media are more disadvantaged regarding socializing than others.

5. Limitations of the research

A limitation of the research is the involvement of nursing and midwifery students from only one university and generalizing the results of the study to the sample group. Another limitation is that the "frequency of use of social media" question in the Student Information Form was answered using a 5-point Likert scale answer key, but a validity and confidence test was not performed for this answer key.

6. Conclusion

In the current research, we found that nursing and midwifery students had positive attitudes towards social media, personal characteristics had no effect on their attitudes, and we determined that the most preferred social media platforms, purpose of using social media and time spent daily on social media affected the students' attitudes. Nursing and midwifery students may use their high level of attitude towards social media to occupationally improve themselves. By doing so, they would not lose time on social media and avoid social isolation. In this direction, classes on the smart use of social media may be added to the curriculum of nursing and midwifery students. A scale could be developed to assess the frequency of use of social media platforms. Students' social media habits should be investigated through qualitative studies by using methods such as focus group discussions.

Conflicts of interest

None.

Role of the funding source

None.

Acknowledgements

The authors would like to thank all students who voluntarily participated in this study. The authors also would like to thank Mr. David Chapman for English language editing of manuscript.

References

- Acar, A., 2013. Attitudes toward blended learning and social media use for academic purposes: an exploratory study. *J. e Learn. Knowl. Soc.* 9 (3), 107–126.
- Akın, A., Özbay, A., Baykut, İ., 2015. The validity and reliability of the Turkish version of the social media use integration scale. *J. Int. Soc. Res.* 8 (38), 647–651.
- Akıncı Vural, Z.B., Bat, M., 2010. Social media as a new communication environment: a research on Ege University Faculty of communication. *J. Yasar Univ.* 20 (5), 3348–3382.
- Aküzü, C., Saraçoğlu, M., 2017. Investigation of attitudes of university students towards social media. *Dicle Univ. J. Ziya Gökalp Fac. Educ.* 32, 803–817. <https://doi.org/10.14582/DUZGEF.789>.
- Alican, C., Saban, A., 2013. Secondary and high school students' attitudes in terms of social media usage: ürgüp sampling. *Sosyal Bilimler Enstitüsü Dergisi* 35 (2), 1–14.
- Al-Shdayfat, N.M., 2018. Undergraduate student nurses' attitudes towards using social media websites: a study from Jordan. *Nurse Educ. Today* 66, 39–43.
- Arslan, A., Kırık, A.M., 2013. Validity and reliability study of the social networking status scale. *Öneri Dergisi* 10 (40), 223–231. <https://doi.org/10.14783/-od.v10i04.1012000372>.
- Aslanıyürek, M., Akın Gürdal, S., Dursun, S., Tunçel, E., İzmirli Ayan, S.M., 2015. Sosyal medya gerçeği ve meslek yüksekokulu öğrencilerinin sosyal medya algısının değerlendirilmesi. *Electron. J. Vocat. Coll.*, December/Aralık 1–8 (In Turkish).
- Barnable, A., Cunnning, G., Parcon, M., 2018. Nursing students' perceptions of confidentiality, accountability, and e-professionalism in relation to Facebook. *Nurse Educ.* 43 (1), 28–31. <https://doi.org/10.1097/NNE.0000000000000441>.
- Bedir, A., 2016. The Effect of Using Social Media on Collage Academic Success and Attitude. Master's Thesis. Atatürk University Institute of Educational Sciences Computer and Instructional Technology Education, Erzurum.
- Bulu, S., Numanoglu, M., Keser, H., 2016. Examination of the attitudes of middle school students towards social media. *Cypriot J. Educ. Sci.* 11 (1), 43–48.
- Chippis, J., Pimmer, C., Brysiewicz, P., Walters, F., Linxen, S., Ndebele, T., Gröbbl, U., 2015. Using mobile phones and social media to facilitate education and support for rural-based midwives in South Africa. *Curatationis* 38 (2), 1–8. <https://doi.org/10.4102/curatationis.v38i2.1500>.
- Çetinkaya, L., 2017. The use of instant messaging applications in the education of medical students: WhatsApp case. *STED* 26 (2), 45–53.
- Çopurlar, C.K., Kartal, M., 2016. What is health literacy? how to measure it? why is it important? *TJFM&PC* 10 (1), 42–47. <https://doi.org/10.5455/tjfm.193796>.
- Dal, N.E., Dal, V., 2014. Personality traits and social network sites usage habits: a research on university students. *Mehmet Akif Ersoy Univ. J. Soc. Sci. Inst.* 6 (11), 144–162.
- Dasgupta, A., Deb, S., 2008. Telemedicine: a new horizon in public health in India. Official Publication of Indian Association of Preventive & Social Medicine. *Indian J. Community Med.* 33 (1), 3–8. <http://doi.org/10.4103/0970-0218.39234>.
- De Gagne, J.C., Yamane, S.S., Conklin, J.L., Chang, J., Kang, H.S., 2018. Social media use and cybercivility guidelines in U.S. nursing schools: a review of websites. *J. Prof. Nurs.* 34, 35–41. <https://doi.org/10.1016/j.profnurs.2017.07.006>.
- Duggan, M., 2015. Mobile Messaging and Social Media 2015. Erişim Tarihi: 29.03.2018. Available. <http://www.pewinternet.org/2015/08/19/mobile-messagingand-social-media-2015/> Accessed June 2015.
- Duke, V.J.A., Anstey, A., Carter, S., Gosse, N., Hutchens, K.M., Marsh, J.A., 2017. Social media in nurse education: utilization and e-professionalism. *Nurse Educ. Today* 57, 8–13.
- Emre, Ş., Altınay Kırılı, E., Malhasyan, M., Altun, İ., Celayir, S., 2018. Smart phones, broad band internet, digital educational resources and medical students. *Çoc. Cer. Derg.* 32 (1), 39–46. <http://doi:10.5222/JTAPS.2018.039>.
- Englund, H., Chappy, S., Jambunathan, J., Gohdes, E., 2012. Ethical reasoning and online social media. *Nurse Educat.* 37 (6), 242–247. <http://doi:10.1097/NNE.0b013e31826f2c04>.
- Erdem Aydın, İ., 2016. A study on usage of social media among university students: Anadolu University case. *Selçuk Ün. Sos. Bil. Ens. Der.* 35, 373–386.
- Erdoğan, B.Z.F., Özata, Z., Doğan, S., Şaşmaz, H.A., 2017. Exploring sharing motivations over the location based mobile application Swarm. *Tüketici ve Tüketim Araştırmaları Dergisi*, Aralık/December 9 (2), 379–400.
- Goel, D., Islamia, J.M., Singh, M., 2016. Impact of students attitudes towards social media use in education on their academic performance. *AIMA J. Manag. Res.* May 10 (2/4), 5–14.
- Gunberg Ross, J., Myers, S.M., 2017. The current use of social media in undergraduate nursing education a review of the literature. *Cont. Educ.* 35 (7), 338–344. <https://doi.org/10.1097/CIN.0000000000000342>.
- Hamm, M.P., Chisholm, A., Shulhan, J., Milne, A., Scott, S.D., Given, L.M., Hartling, L., 2013. Social media use among patients and caregivers: a scoping review. *BMJ Open* 3, e002819. <http://doi:10.1136/bmjopen-2013-002819>.
- Hamm, M.P., Shulhan, J., Williams, G., Milne, A., Scott, S.D., Hartling, L., 2014. A systematic review of the use and effectiveness of social media in child health. *BMC Pediatr.* 14 (138), 1–15. <http://www.biomedcentral.com/1471-2431/14/138>.
- İşık, A.H., Güler, İ., 2010. Mobile application study in telemedicine and analysis of mobile communications technology. *Bilişim Teknolojileri Dergisi* 3 (1), 1–10.
- İşıktaş, S., 2016. Evaluation of highlights of vocational school students to use social media. *Akademik Sosyal Araştırmalar Dergisi* 4 (35), 565–575.
- Jackson, J., Gettings, S., Metcalfe, A., 2018. Contemporary issues “The power of Twitter”: using social media at a conference with nursing students. *Nurse Educ. Today* 68, 188–191. <https://doi.org/10.1016/j.nedt.2018.06.017>.
- Jones, R., Kelsey, J., Nelmes, P., Chinn, N., Chinn, T., Proctor Childs, T., 2016. Introducing Twitter as an assessed component of the undergraduate nursing curriculum: case study. *J. Adv. Nurs.* 72 (7), 1638–1653. <https://doi.org/10.1111/jan.12935>.
- Kılıç, B., Kırılı, G., Ön Esen, F., 2017. The relationship between the usage of social media and self perception: a research on tourists. *Gaziantep Univ. J. Soc. Sci.* 16 (1), 70–85.
- Kilis, S., Rapp, C., Gülbahar, Y., 2014. Perception of instructors about social media usage in higher education: the cases of Turkey and Germany. *J. Instr. Technol. Teach. Educ.* 3 (3), 20–28.
- Koç, B., Tathi, H., 2017. Use of social networking sites of bingöl university student attitudes and behaviours. *Bingöl Üniversitesi Sosyal Bilimler Enstitüsü Dergisi* 7 (13), 71–82.
- 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. *J. Med. Internet Res.* 15 (4), 1–16. <http://doi:10.2196/jmir.1933>.
- Otrar, M., Argin, F.S., 2014. Multidimensional examination of the adolescents' attitude concerning social media. *J. Educ. Humanit.: Theory Pract.* 5 (10), 3–22.
- Otrar, M., Argin, F.S., 2015. The examination of the students' attitudes towards social media within the context of habits. *J. Res. Educ. Teach.* 4 (1), 391–403.
- Oz, M., 2014. Changes in use and perception of privacy: exploring facebook users' privacy concerns and awareness of privacy implications. *J. Yasar Univ* 9 (35), 6099–6260.
- Öztürk, M.F., Talas, M., 2015. Interaction of social media and education. *Zeitschrift für die Welt der Türken J. World Turks* 7 (1), 101–120.
- Peker, A., Çukadar, F., 2016. Examination of relationship between cognitive flexibility and attitudes towards the use of social media. *Sakarya Univ. J. Educ.* 6 (2), 66–79.
- Price, A.M., Devis, K., LeMoine, G., Crouch, S., South, N., Hossain, R., 2018. First year nursing students use of social media within education: results of a survey. *Nurse Educ. Today* 61, 70–76.
- Ross, J., 2012. Social networking: possible risks to nurses. *J. PeriAnesthesia Nurs.* 27 (3), 212–213. <https://doi.org/10.1016/j.japan.2012.03.002>.
- Sarsar, F., Başbay, M., Başbay, A., 2015. Use of social media in learning and teaching process. *Mersin Univ. J. Facul. Educ.* 11 (2), 418–431.
- Savcı, M., Aysan, F., 2017. Technological addictions and social connectedness: predictor effect of internet addiction, social media addiction, digital game addiction and smartphone addiction on social connectedness. *Dişünen Adam J. Psychiatry Neurol. Sci.* 30, 202–216. <https://doi.org/10.5350/DAJPN2017300304>.
- Solmaz, B., Tekin, G., Herzem, Z., Demir, M., 2013. An application on the use of internet and social media. *Selçuk İletişim* 7 (4), 23–32.
- Şişman Eren, E., 2014. Developing social media use purposes scale and examining based on some personal variables. *H. U. J. Educ.* 29 (4), 230–243.
- Tektaş, N., 2014. A research on university students' social networking habits. *J. Hist. Sch. (JOHS)*, March 7 (17), 851–870.
- Tower, M., Latimer, S., Hewitt, J., 2014. Social networking as a learning tool: nursing students' perception of efficacy. *Nurse Educ. Today* 34, 1012–1017.
- Tuominen, R., Stolt, M., Salminen, L., 2014. Social Media in Nursing Education: the View of the Students Vol 2014. Hindawi Publishing Corporation Education Research International, pp. 1–6. <https://doi.org/10.1155/2014/929245>.
- Tutgun Ünal, A., 2015. Social Media Addiction: a Research on University Students. Doctorate Thesis. Marmara University Social Sciences Institute Department of

- Journalism, Department of Informatics, Istanbul.
- Usher, K., Woods, C., Glass, N., Wilson, R., Mayner, L., Jackson, D., Brown, J., Duffy, E., Mather, C., Cummings, E., Irwin, P., 2014. Australian health professions student use of social media. *Collegian* 21, 95–101. <https://doi.org/10.1016/j.colegn.2014.02.004>.
- Ünsal, S., Vayvay, N.A., 2018. Investigation of the relationship between teacher candidates' social media usage and attitudes towards e-learning. *Route Educ. Soc. Sci. J.* 5 (5), 25–40.
- Ventola, C.L., 2014. Social media and health care professionals: benefits, risks, and best practices. *PT* 39 (7), 491–520.
- Willoughby, M., 2018. A review of the risks associated with children and young people's social media use and the implications for social work practice. *J. Soc. Work. Pract.* 1465–3885. (Online). <https://doi.org/10.1080/02650533.2018.1460587>.
- World Health Organization, 2010. TELEMEDICINE Opportunities and developments in member states. Available. http://www.who.int/goe/publications/goe_telemedicine_2010.pdf Accessed June 2018.