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THE CORRELATION BETWEEN ORTHOREXIA NERVOSA AND SOCIAL MEDIA  
USE IN NURSING STUDENTS

Hemşirelik Öğrencilerinde Ortoreksiya Nervosa ve Sosyal Medya Kullanımı Arasındaki  
İlişki

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ABSTRACT

This cross-sectional and descriptive study investigated the correlation between orthorexia nervosa and social media use in nursing students. The study sample consists of 339 students who volunteered to participate in the research. Data were collected using the Sociodemographic Data Form, the Social Media Use Integration Scale (SMUIS), and the ORTO-11 scale. The mean ORTO-11 scale score of the nursing students was  $27.98 \pm 4.92$ , and 30.38% were under 25 points. A significant negative relationship was found between the ORTO-11 scores and the SMUIS total scores ( $r = -0.136$ ,  $p=0.01$ ), the Integration into Social Routines sub-dimension ( $r = -0.138$ ,  $p=0.01$ ), and the duration of social media use ( $r = -0.11$ ,  $p = 0.04$ ). It was found that there was no difference between orthorexia tendencies according to the type of social media tools used by the students, but the orthorexia nervosa tendency increased as the duration of social media use increased. Curriculum studies can be recommended so that nursing faculty students can reach accurate information about the effects of social media and healthy nutrition.

**Keywords:** Eating disorders, Nursing students, Orthorexia nervosa, Social media

ÖZ

Kesitsel ve tanımlayıcı olan bu çalışmada hemşirelik öğrencilerinde ortoreksiya nervosa ile sosyal medya kullanımı arasındaki ilişki araştırıldı. Araştırmanın örneklemini araştırmaya katılmaya gönüllü olan 339 öğrenci oluşturdu. Veriler Sosyodemografik Veri Formu, Sosyal Medya Kullanım Entegrasyon Ölçeği (SMUIS) ve ORTO-11 ölçeği kullanılarak toplandı. Hemşirelik öğrencilerinin ORTO-11 ölçeği puan ortalamaları  $27.98 \pm 4.92$  olup, öğrencilerin %30.38'i 25 puanın altındaydı. ORTO-11 puanları ile SMUIS toplam puanları ( $r = -0.136$ ,  $p=0.01$ ), Sosyal Rutinlere Uyum alt boyutu ( $r = -0.138$ ,  $p=0.01$ ) ve sosyal medya kullanım süresi ( $r = -0.110$ ,  $p=0.04$ ) arasında negatif yönde anlamlı ilişki bulundu. Öğrencilerin kullandığı sosyal medya araçlarının türüne göre ortoreksiya eğilimi arasında fark olmadığı, ancak sosyal medya kullanım süresi arttıkça ortoreksiya nervosa eğiliminin arttığı bulundu. Hemşirelik fakültesi öğrencilerinin sosyal medyanın ve sağlıklı beslenmenin etkileri hakkında doğru bilgilere ulaşabilmeleri için müfredat çalışmaları yapılması önerilebilir.

**Anahtar kelimeler:** Hemşirelik öğrencileri, Ortorexia nervosa, Sosyal medya, Yeme bozuklukları

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## INTRODUCTION

One of the most important developments of the twenty-first century, known as the information and technology age, has been social media tools and network development. Approximately half of the world's population is active social media user; however, in Turkey, this rate is known to be above the world average, and approximately two-thirds of the users are aged between 18-34 years old (Hootsuit, 2019).

Social media platforms rapidly permeating our lives, are known to have many sociological, cultural, political, and psychological effects (Sağbaşı et al., 2016). One of the substantial effects of social media is the socialization of the health concept (Tosyalı & Sütçü, 2016). In Turkey, 69.6% of individuals are reported to use the internet to elicit health-related information (Turkish Statistical Institute [TUIK], 2020). According to Turan et al. (2020), 83.9% of nursing students followed the developments in the health literature on the internet; 73.2% of them thought that the information obtained from the internet was helpful in their health-related decisions; and 51.7% of them searched for health information on the internet in the last week (Turan et al., 2020). Information about healthy life and nutrition are among the most attractive topics on social media platforms (Duran, 2016; Klassen, Douglass, Brennan, Truby & Lim, 2018; Raggatt et al., 2018). Nowadays, health is accepted as the result of the individual's behavior and their responsibility (Håman, Barker-Ruchti, Patriksson & Lindgren, 2015). In this context, individuals access unlimited information from many sources on social media, such as how they should/should not behave, which foods they should avoid/consume to protect their health etc. (Klassen et al., 2018).

Social media plays the role of a support network by enabling people around the world to connect with each other for a healthy diet and by facilitating a healthier / more natural diet (Haddad et al., 2020). The increase in social media use and cultural awareness about nutrition is essential in setting healthier foods preference into an inevitable trend (Haddad et al., 2020). Especially young adults have been reported to be open to healthy nutrition and recipe tips via social media (Klassen et al., 2018).

Beside such positive effects on health of social media, negative consequences are the point in question as well (Turner & Lefevre, 2017). Focusing on avoiding unhealthy foods, the concept of "clean eating" has become a popular health trend in recent years and has taken place in many social media posts. Those who follow this trend make great efforts to only consume additive-free, natural, unprocessed foods. However, this situation can sometimes lead to nutritional deficiencies by turning into one-typed and restrictive diets, such as consuming only

raw foods (Fivian & Wood, 2019). Recently, a viral health trend has been “fitspiration” (an amalgamation of the words fitness and inspiration), according to which individuals post images, quotes, and suggestions about fitness and nutrition on social media. These messages and images being seemingly innocent and healthy behaviors, highlight images of the ideal, slim and athletic body type, causing followers to resort to restrictive diets and extreme exercises to achieve these idealized body sizes (Fivian & Wood, 2019; Raggatt et al., 2018). Increasing such images and posts on social media, as well as the emphasis on healthy, clean and natural food consumption, can lead to eating disorders as these behaviors become obsessions in individuals. There is increasing evidence of the relationship between traditional media (television, magazines, etc.), social media, internet use, and eating disorders (Hefner et al., 2014; Sidani, Shensa, Hoffman, Hanmer, & Primack, 2016; Tiggemann & Zaccardo, 2018). Social media use in young adults has been shown to negatively affect body image, depression, social comparison, and eating disorders (Turner & Lefevre, 2017). A recent study conducted with university students determined that the risk of eating disorders and dissatisfaction with body image increased as internet addiction increased (Ayran, Süleyman, Avcı & Arık, 2021). A study examining the relationship between social media use and body image evaluation in Malaysian youth, found that as social media use increased, the body image evaluation scores decreased (Khodabakhsh, & Leng, 2020). Another study found that Instagram negatively affected body image, increased negative emotions and decreased positive affects, while Facebook did not (Engeln, Loach, Imundo & Zola et al., 2020).

Although not yet included in the category of eating disorders in the Diagnostic and Statistical Manual of Mental Disorders-Fifth Edition (DSM-5), Orthorexia Nervosa (ON) is defined as a disorder characterized by mental obsession and occupation related to a healthy diet (American Psychiatric Association, 2013; Donini, Marsili, Graziani, Imbriale & Cannella, 2004). This term, used for the first time by Bratman (1997), was created by combining the words “Orthos”, meaning 'correct/right' and “orexia”, meaning 'appetite' and it has been used for situations involving the pathological focus of the individual on healthy, pure, and correct food consumption (Donini et al., 2004; Scarff, 2017). For an orthorexic individual, nutritional value, in other words, the food's quality is more important than the flavor (Cena et al., 2019; Varga, Thege, Dukay-Szabó, Túry & van Furth, 2014). Behaviors such as restrictive dietary practices, ritualized eating habits, and strict avoidance of foods considered to be unhealthy can be seen in individuals with orthorexia (Koven & Abry, 2015). Although concerns and efforts towards healthy eating are positive behaviors, it is stated that those behaviors can be defined as a disorder when they turn into an exaggerated effort to strictly adhere to a healthy diet, when

they become a compulsion affecting the functionality of the person by keeping the individual occupied, and when they create any clinical problems (Cena et al., 2019).

In studies related to ON, health sciences students; (Duran, 2016), medical (Özge, 2018) and nursing students (Aktürk Gül & Erci, 2019; Arslantaş, Adana, Öğüt, Ayakdaş & Korkmaz, 2017), dieticians (Asil & Sürücüoğlu, 2015; Arusoğlu, 2018), individuals professionally involved in sports (Malmberg, Bremander, Olsson & Bergman, 2017), and those following diets where more than one food are prohibited at the same time (vegans, macrobiotics, and raw consumers, etc.) (Çiçekçioğlu & Tunçay, 2018) are reported as groups at risk of ON.

The frequency of using social media tools in young adulthood and the potential of these tools to shape healthy eating behaviors, added to the fact that nursing students are in the ON risk group, makes it crucial to determine orthorexia tendency and related factors in nursing students (Vaterlaus, Patten, Roche & Young 2015). In addition, nursing students, as the future health care professionals, hold a critical position in educating society on health promotion-related nutritional habits, health literacy, and information resources. No study investigating the relationship between ON and social media use in nursing students could be found in current literature. Therefore, this study aims to determine the frequency of ON in nursing students and the relationship between ON and social media use.

This study sought answers to the following questions:

- 1.What are the orthorexia tendency levels among nursing students?
- 2.Does orthorexia tendency of nursing students differ according to their social media use?
- 3.Is there a relationship between nursing students' social media use and their orthorexia nervosa tendency?

## **MATERIAL AND METHOD**

### **Study Design**

This research was designed as a descriptive and correlational research type to determine the frequency of ON in nursing students and the relationship between ON and social media use.

### **Participants**

The study population consisted of 1191 students (1st grade: 327 students, 2nd grade: 325 students; 3rd grade: 259 students; 4th grade: 280 students) studying at the nursing faculty of a state university in Istanbul during 2018-2019 academic year.

The sample size was calculated to include a minimum of 291 students by using the stratified convenience sampling method, assuming a 5% error rate, 95% confidence interval and 5% event frequency.

The formula, in which the number of individuals in the population is known, was used to determine the sample size:

$$n = \frac{N t^2 p q}{d^2 (N - 1) + t^2 p q} = \frac{1191 * 1,96^2 * 0,5 * 0,5}{0,05^2 * (1191 - 1) + 1,96^2 * 0,5 * 0,5} = 291$$

Secondly, the ratio representing the universe of each class was determined (1191:291=4.09). The minimum number of students from each class included in the sample was determined according to these ratios: 1<sup>st</sup> Grade: 327:4.09=80 students; 2<sup>nd</sup> Grade: 325:4.09=80 students; 3<sup>rd</sup> Grade: 259:4.09=63 students; 4<sup>th</sup> Grade: 280:4.09=68 students. The research was terminated during the data collection period by reaching 339 students.

The inclusion criteria were determined as being a registered student at the nursing faculty where the study was conducted, using at least one of the social media tools, and being the age of 18 or older. The exclusion criteria from the study were determined as being under the age of 18 and not using any of the social media tools.

## **Instruments**

In this study Sociodemographic Data Form, Social Media Use Integration Scale, and ORTO-11 scale measurement tools were used.

## **Sociodemographic Questionnaire Form**

It is a 10-question form created by researchers benefitting from the literature, including questions about the sociodemographic characteristics of the students and social media usage characteristics (Arusoğlu, 2018; Aslantaş et al., 2017; Fıçıcıoğlu, 2018; Tosyalı & Sütçü, 2016). For sociodemographic characteristics, seven questions were asked about gender, age, grade, weight, height, income status, and weight satisfaction status. Three questions were about the used social medias (Twitter, Facebook, Pinterest, Snapchat, Instagram, Youtube, etc.), duration of social media use, and the influence of social media on individual's own decisions. Anthropometric measurements of students, such as height, and weight were obtained according to student reports, and Body Mass Index was calculated. BMI scores were evaluated based on

the weight classification criteria of the World Health Organization (World Health Organization [WHO], 2022).

### **Social Media Use Integration Scale (SMUIS)**

The scale developed by Jenkins-Guarnieri et al. (2013) is a six-point Likert type (1- totally disagree, 6- totally agree). The scale consists of 10 items and two sub-dimensions: Social Integration and Emotional Connection, and Integration into Social Routines. A minimum of 10 and a maximum of 60 scores can be obtained on the scale. Higher scores indicate an increase in social media use. Cronbach's alpha coefficients of the original form of the SMUIS were reported as 0.91, 0.89 for the social integration and emotional connection subscale, and 0.83 for the integration into social routines subscale (Jenkins-Guarnieri, Wright & Johnson, 2013). The Turkish version validity and reliability of the scale was carried out by Akin, Özbay & Baykut (2015); Cronbach's alpha coefficients of the Turkish version were reported as 0.87 for the social integration and emotional connection subscale, 0.71 for the integration into social routines subscale, and 0.87 for the whole scale (Akin et al. 2015). In this study, Cronbach alpha's coefficient was found as 0.85, 0.85, and 0.71, for the total scale, social integration and emotional connection subscale, and integration into social routines respectively.

### **ORTO-11 Scale**

The ORTO-11 scale developed to determine the healthy nutrition obsession in individuals is the Turkish version of the ORTO-15 form developed by Donini et al. (2005) (Arusoğlu, Kabakçı, Köksal & Merdol, 2008; Donini, Marsili, Graziani, Imbriale & Cannelle, 2005). Its validity and reliability study in Turkish society was carried out by Arusoğlu et al. (2008). It was adapted to Turkish as ORTO-11 as a result of eliminating items with factor loads of 0.50 and below. The scale is a four-point Likert type (1-Always, 4-Never) measurement tool. The scale consists of 11 items and has no sub-dimensions. Generally, a minimum of 11 and a maximum of 44 points can be obtained in the Turkish version, with low scores indicating orthorexic tendency. In this study, the cut-off point calculated over the 25th percentile is 25 points. Cronbach alpha of the scale was reported as 0.62 by Arusoğlu et al. (2008). In this study, Cronbach's alpha coefficient was found as 0.76 for the total scale.

### **Data Collection**

Data collection took place in March-April 2019. First, the lecturers who conducted the course were informed about the research, and a suitable time was determined in the student's curriculum to carry out the questionnaires. The data were collected from students after

scheduled course times. Students were informed about the research in the classroom, and data collection tools were distributed to those who agreed to participate. In addition, students were informed that they could withdraw from the study whenever they wanted. Lastly, students were informed that the survey was optional and not associated with grades/performance in the class. Paper-and-pencil self-administered method was used, and data collection took approximately 15-20 minutes. Questions that students did not understand were explained without comment.

### **Data Analysis**

Data were analyzed using the Statistical Package for the Social Sciences (SPSS for Windows, version 14.01, license no: 9869264). Parametric and nonparametric tests were performed. The results were evaluated at a 95% confidence interval and  $p < 0.05$  significance level. In the calculation of descriptive data, frequency, and percentage values were calculated for categorical variables and both mean and standard deviation values for continuous variables. A normal distribution Kolmogorov-Smirnov test of variables was performed. Mann-Whitney U test was used in paired groups for testing categorical variables and the difference between variables. Kruskal-Wallis H test was used to compare more than two groups, and Spearman Correlation Analysis for continuous data to examine the relationship between variables.

### **Limitations**

The study is limited to the information given by the students a nursing faculty in Istanbul based on self-report, so it cannot be generalized.

### **Ethical Considerations**

Before starting the study, permission was obtained from the Istanbul University Social and Human Sciences Ethics Committee (No: 9624-16.01.2019). Institutional permission was obtained from the Faculty of Nursing where the study was conducted (No: 34186-28.02.2019). The students participating in the study were informed about the purpose of the study before the data collection, and their written informed consent was obtained. The students were informed that they can withdraw from the study whenever they wanted. Permissions for the use of scales were obtained from the authors.

## **RESULTS**

### **Characteristics of the Nursing Students**

Regarding the examination of the distribution of nursing students according to their socio-demographic characteristics, the mean age was  $20.74 \pm 1.93$  (range: 18-37), 84.4% ( $n = 286$ ) of

the students were women, their mean body mass index was  $22.15 \pm 3.31$  kg/m<sup>2</sup> (range:16-37), 25.7% (n = 87) were 3<sup>rd</sup> grade students, whereas 60.8% (n = 206) reported their economic status as ‘expenses are equal to their income’.

The descriptive characteristics of the nursing students participating in this study regarding social media use, ORTO-11 scale scores, and mean scores of SMUIS total and sub-dimensions were given in Table 1. The nursing students participating in the study were determined to spend an average of  $3.42 \pm 1.91$  hours (min-max: 1-13) a day on social media, and the most widely used social media tools among students were Instagram (86.1%) and Youtube (81.4%). Considering the distribution of the scale according to the cut-off point, 30.38% of the students were found to be below 25 points (higher orthorexic tendency) (Table 1).

**Table 1.** Distribution of Students' Social Media Use Behaviors and Scale Scores

<b>Variables</b>	<b>n</b>	<b>%</b>
<b>Use of Facebook</b>		
Yes	74	21.8
No	<b>265</b>	<b>78.2</b>
<b>Use of Twitter</b>		
Yes	117	34.5
No	<b>222</b>	<b>65.5</b>
<b>Use of Instagram</b>		
Yes	<b>292</b>	<b>86.1</b>
No	47	13.9
<b>Use of Youtube</b>		
Yes	<b>276</b>	<b>81.4</b>
No	63	18.6
<b>Use of Snapchat</b>		
Yes	42	12.4
No	<b>297</b>	<b>87.6</b>
<b>Use of WhatsApp</b>		
Yes	<b>321</b>	<b>94.7</b>
No	18	5.3
<b>Use of Pinterest</b>		
Yes	38	11.2
No	<b>301</b>	<b>88.8</b>
<b>Influence of social media on individual's own decisions</b>		
Yes	67	19.8
Partially	<b>176</b>	<b>51.9</b>
No	96	28.3
<b>According to the ON-11 cut-off score</b>		
With $\leq 25$ points	103	30.38
> 25 points	236	69.62
<b>Measuring Tools</b>		
	<b>X<math>\pm</math>SS</b>	<b>Min-max</b>
<b>ORTO-11</b>	27.98 $\pm$ 4.92	14-40
<b>Duration of -social media use (hours/day)</b>	3.42 $\pm$ 1.91	1-13
<b>SMUIS</b>	27.53 $\pm$ 8.77	10-57
<b>Social Integration and Emotional Connection Sub-Dimension</b>	13.19 $\pm$ 5.78	4-24
<b>Integration into Social Routines Sub-Dimension</b>	14.33 $\pm$ 4.18	6-36

## Comparison of Nursing Students' Tendency of Orthorexia Nervosa According to Some Social Media Use

There was no significant difference between the social media tools used by the students and the ORTO-11 mean scores; however, the ORTO-11 mean scores of the students whose own decisions were not affected by the information obtained from social media were found to be significantly higher than the affected students ( $p < 0.00$ ) (Table 2).

**Table 2.** Comparison of Nursing Student's Social Media Use with ORTO-11 Mean Scores

	N	ORTO-11 scores Mean Rank	U	Test Value	p-value
<b>Use of Facebook</b>					
Yes	74	182.49	8881.00	Z=-1.242	0.214
No	265	166.51			
<b>Use of Twitter</b>					
Yes	117	168.27	12784.50	Z=-.237	0.813
No	222	170.91			
<b>Use of Instagram</b>					
Yes	292	167.61	6164.50	Z=-1.121	0.262
No	47	184.84			
<b>Use of Youtube</b>					
Yes	276	171.86	8179.50	Z=-.735	0.463
No	63	161.83			
<b>Use of Snapchat</b>					
Yes	42	174.88	6032.00	Z=-.346	0.730
No	297	169.31			
<b>Use of WhatsApp</b>					
Yes	321	170.68	2670.50	Z=-.541	0.588
No	18	157.86			
<b>Use of Pinterest</b>					
Yes	38	169.08	5684.00	Z=-.062	0.951
No	301	170.12			
<b>Influence of social media on individual's own decisions</b>					
Yes	67	121.36		X <sup>2</sup> =31.28	<0.001
Partially	176	167.70			
No	96	208.16			

Z: Mann Whitney- U, X<sup>2</sup>: Kruskal Wallis

## Relationship between Nursing Students' Orthorexia Nervosa Tendency and Social Media Use

The correlation between the mean score of the total and sub-dimensions of SMUIS and the mean score of the ORTO-11 scale is given in Table 3. In the analysis of the correlation between ORTO-11 scores and total SMUIS scores, SMUIS and ORTO-11 were found weakly negatively correlated ( $r = -0.136$ ,  $p = 0.01$ ) (Table 3). Also, it was found a statistically significant negative correlation between the duration of social media use (hours/day) and ORTO-11 scores ( $r = -0.11$ ;  $p = 0.04$ ).

**Table 3.** Relationship Between Students' SMUIS and ORTO-11 Scale Scores

	ORTO-11	SMUIS	Integration into Social Routines
<b>SMUIS</b>	-0.136 <b>p= 0.01</b>		
<b>Integration into Social Routines</b>	-0.138 <b>p=0.01</b>	0.824 <b>p&lt;0.00</b>	
<b>Social Integration and Emotional Connection</b>	-0.102 <b>p=0.06</b>	0.912 <b>p&lt;0.00</b>	0.537 <b>p&lt;0.00</b>
<b>Duration of social media use (hours/day)</b>	-0.110 <b>p=0.04</b>		

\*Spearman Correlation Analysis; SMUIS: Social Media Integration Scale

## DISCUSSION

The findings obtained from the study were discussed by considering the scores the nursing students got from the ORTO-11 scale, whether the orthorexia tendency of the students differs according to their social media use, and the relationships between the scores of the Social Media Use Integration Scale and ORTO-11 scores.

Regarding the scores obtained from the scales, approximately one-third of the nursing students participating in this study carry a risk for ON. Studies examining the frequency of ON in nursing students are limited in the literature. In a research conducted by Arslantaş et al. (2017) with 181 nursing students, 45.3% were reported to be at risk of ON. While Aktürk et al. (2019) found higher rates (73.5%). Turner and Lefevre (2017) reported that the prevalence of ON in the study population (49%) was higher than in the general population. The differences between the rates of ON prevalence in nursing students may be due to the different sociocultural and personality traits of the nursing students participating in the study. It has been shown that sociocultural factors and personality traits play an essential role in the development of eating disorders (Aktürk et al., 2019; Strahler et al., 2020).

Considering the examination of the relationship between nursing faculty students' social media use and their tendency to ON, orthorexic tendencies of the students were found to increase accordingly with the duration of social media use and the influence of social media on their own decisions. Studies in this area are very limited in the literature, and no studies investigating the use of social media and orthorexic tendencies of nursing students were found. Beside that, many studies have shown that social media use has a triggering role in other eating disorders (Ayran et al., 2021; Hefner et al., 2014; Raggatt et al., 2018; Sidani et al., 2016). In a systematic review by Klassen et al. (2018), 47 studies examining the effects of social media on

eating disorders found that individuals' nutritional habits were greatly influenced by social media and that people frequently used social media especially to get healthy eating tips. Sidani et al. (2016), in a study conducted with 1765 people aged between 19 and 32, found a significant relationship between increased frequency and duration of social media use and eating disorders. Haddad et al. (2019), in their study on the Lebanese population, found that those more exposed to TV and media programs that pressure people to lose weight showed more orthorexic tendencies and behaviors.

The hypothesis that ON is related to social media is attributed to the fact that social media use is known as a trigger for many different mechanisms, such as social appearance anxiety, body image, self-perception, and eating attitude in the literature (Brytek-Matera et al., 2018; Fardouly & Vartanian, 2016). Considering the research conducted by Puglia (2017), increased social media use of young people aged between 18-19 years old, was related to increased comparison of the images on social media with their body images (Puglia, 2017). Similarly, female undergraduate students who were exposed to "fitspiration" images on Instagram, which aim to inspire people to exercise and eat healthy so to gain an attractive and fit body, have been reported to experience more negative mood and body dissatisfaction than the control group not exposed to such images (Tiggemann & Zaccardo, 2015). This data may help to understand how social media use may have increased orthorexic tendencies through these mechanisms.

Orthorexic tendencies do not differ according to the social media tools used in the present study. However, in the study of Turner and Lefevre (2017), the first study examining the relationship between social media and ON in the literature, the use of Instagram, an image-based application, was found to increase orthorexic tendencies, Twitter had the opposite effect, but these correlations were low (Turner & Lefevre, 2017). In this study, although the students used Instagram at a high rate, there was no significant difference between other social media tools in terms of ON tendency. This result may be due to different accounts followed by students on Instagram or cultural differences. There is a need for new studies investigating the effects of social media accounts on ON development.

In our study, where the relationship between students' tendency to ON and their use of social media was examined; A significant negative correlation was found between the total score of the SMUIS and the Integration into Social Routines Sub-Dimension of the SMUIS and the ORTO-11 scores. These results mean that as students' use of social media and their level of integrating it into their lives increase, their orthorexic tendency increases. Social media use is known to be perceived by nursing students as a part of daily routine and is used for many purposes, as well as to get healthy nutrition tips (Bilgiç, Özcanan & Altay, 2017; Klassen et al.,

2018). Considering that ON is a problem experienced in the frame of the aim to eat healthy, it is not surprising that the tendency of ON increased with the rising of SMUIS scores in our study.

Social integration and emotional connection and integration into social routines sub-dimension of SMUIS examine feelings such as tension, unhappiness, and detachment from life that a person feels when not connected to social media. This research found no significant relationship between this sub-dimension and ON. These findings suggest that ON tendency is not related to social media addiction and the emotional effects of living without social media. However, social media, which has become a part of our daily routine, is thought to be related to the influencing and guiding role of body image, nutrition, and health, as stated before.

## CONCLUSION

According to the study results approximately one-third of nursing students showed a tendency towards ON. While students' tendency towards ON did not differ according to the social media tools used, it has been determined that as the duration of social media use increases, orthorexic tendency increases. Students whose decisions were influenced by the information obtained from social media were identified to have more orthorexic tendencies. As the students' levels of social media use and usage types integrated into social routine increased, in other words, became a part of daily routine, ON tendencies increased as well.

In line with the research findings, health literacy and social media use should be added to the curriculum so that the nursing faculty students can access accurate information about the effects of social media and healthy nutrition, in order to prevent the development of ON in nursing students or to decrease its frequency. The strength of our study is related to the fact that it is the first study to examine the relationship between the use of social media and ON among nursing students. It may be beneficial to conduct qualitative studies on the subject to better understand the relationship between social media use and orthorexic tendencies in future.

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