



DETERMINATION OF ONLINE PRIVACY AWARENESS OF UNIVERSITY STUDENTS: A STUDY IN THE SAMPLE OF GÜMÜŞHANE UNIVERSITY FACULTY OF COMMUNICATION

ÜNİVERSİTE ÖĞRENCİLERİNİN ÇEVİRİMİÇİ MAHREMİYET FARKINDALIĞI TESPİTİ: GÜMÜŞHANE ÜNİVERSİTESİ İLETİŞİM FAKÜLTESİ ÖRNEKLEMİNDE BİR ARAŞTIRMA

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Abstract

Today, with the development of information and communication technologies, online platforms have become one of most important means of communication for individuals. The security and privacy of users' personal data in online platforms where users intensively share information is of paramount importance. In view of this, the current study seeks to examine online privacy awareness of university students. In line with this, this study aims to determine the level of awareness of students about this issue and to determine whether there is a significant difference in privacy awareness in terms of some demographic variables. With this aim in mind, the study data were collected from 282 students older than 18 studying at Gümüşhane University Faculty of Communication using the purposeful sampling method. The analysis of the data collected indicated that the online awareness levels of the participants are high.

Keywords: Privacy, Online Privacy, Awareness, Gümüşhane University.

Öz

Günümüzde bilgi ve iletişim teknolojilerinin gelişimi ile birlikte çevrimiçi platformlar bireylerin önemli iletişim araçlarından biri olmaktadır. Kullanıcılar tarafından yoğun bir şekilde bilgi paylaşımının gerçekleştirildiği çevrimiçi platformlarda kullanıcıların kişisel verilerinin güvenliği ve gizliliği önemli bir konudur. Bu bağlamda çalışma, öğrencilerinin çevrimiçi mahremiyet farkındalığını incelemeyi amaçlamaktadır. Araştırma, öğrencilerin bu konu hakkında farkındalık düzeylerinin tespit etmek ve farklı demografik değişkenler arasında mahremiyet farkındalığına yönelik anlamlı farklılık olup olmadığını belirlemektir. Bu amaca ulaşmak için veriler, Gümüşhane Üniversitesi İletişim Fakültesinde öğrenim gören 18 yaş üstü 282 öğrenciden amaçlı örneklem yöntemi yoluyla toplanmıştır. Verilerden elde edilen sonuca göre, katılımcıların çevrimiçi farkındalık düzeylerinin yüksek olduğu görülmektedir.

Anahtar Kelimeler: Mahremiyet, Çevrimiçi Mahremiyet, Farkındalık, Gümüşhane Üniversitesi.



INTRODUCTION

Online privacy has become one of the top concerns of the digital age. In the modern era when we spend most of our daily lives on the internet, protection of personal information and being aware of and determining who can access personal information emerges as a critical issue. With the spread of digital technologies, the issues of sharing personal information and protecting privacy in online environments have become even more important. While social media platforms, shopping sites and various applications collect user data, they ignore the privacy rights of individuals. This poses severe risks such as misuse of personal data, unauthorized tracking and online identity theft. Especially young people and university students use the internet intensively for both educational and social purposes and share their personal information on a variety of digital platforms. In view of this, confidentiality of personal data and the protection of privacy in online environments are becoming an increasingly critical issue. There are many studies on online privacy of students and youth in the literature. The following studies can be cited as examples of such studies.

Youn (2005) discussed young people's perceptions of online privacy and how they cope with it using a risk-benefit assessment approach. The study revealed that higher risk perception of personal information disclosure led to less willingness of the participants to provide information to websites. It has also been found that as the participants become less likely to provide their information to a website, they tend to exhibit adaptive coping behaviors, such as providing inaccurate or incomplete information. In a study conducted by Tuunainen, Pitkänen, & Hovi, (2009) on online privacy awareness, it was concluded that most Facebook users were not aware that they disclosed seriously private information and that their information could be seen by others, and Facebook privacy policy and terms of use are largely unknown and not understood by its users. In another experimental study on privacy awareness in Web forums by Pötzsch et al. (2010) the users were presented clues about privacy (who can see my posts, what kind of personal data can forum providers see etc.) The results of the experimental study show that the presentation of privacy-related clues indeed increased privacy awareness of forum users. Boyd and Hargittai (2010) examined the attitudes and practices of a group people composed of 18 and 19 year olds about Facebook's privacy settings. Researchers have concluded that young people disclose their personal information in spite of having online privacy concerns. A study by Thon and Jucks (2014) determined that individuals' privacy awareness was high, but their communication was not compatible with this level of awareness. In another study, Semiz Türkoğlu (2018) concluded that young people compromise their privacy as social media use increases. In another study by Jegede et al. (2017) on students, the researchers concluded that a high level of literacy does not necessarily mean a high level of privacy awareness. It was also found that privacy-conscious participants did not have the skills and knowledge to ensure data and user privacy on their mobile devices. It is determined that those who have this knowledge and skill make concessions from privacy due to financial gain. In the study by Karadaş and Kara (2021) it was concluded that there was a positive and significant relationship between online privacy awareness and digital literacy, virtual environment interpersonal trust, age, length of internet use in years, and length of mobile device use in years, and there was no significant relationship between online privacy awareness and year of social media use. In the study by Kaya and Yaman (2022) on online privacy literacy, it was observed that university students had a high level of online privacy literacy and female students had higher levels of online privacy literacy than male students. In another study on the same issue, the relationship between online privacy anxiety and emotional intelligence of university students was examined. Yabancı et al. (2018) found that there was no significant relationship between the emotional intelligence levels of university students and their online privacy anxiety levels. In another study, Avcı and Kayıran (2023) found that the online privacy awareness of students studying in the field of child development was high. In addition, no significant difference was found between the screen addiction and online privacy awareness levels of students according to gender, class and social media usage purposes.

The current study aims to determine the online privacy awareness levels of university students and to determine whether there is a significant difference in privacy awareness levels in terms of different demographic variables. With this aim in mind, a questionnaire was administered to the students recruited among the students of Gümüşhane University Faculty of Communication by purposeful sampling method. While the first part of the two-part questionnaire questions was about demographic

characteristics and social media use, the second part of the questionnaire included the *"Online Privacy Awareness Scale"*, which was validated by Korkmaz et al. (2021) The data obtained as a result of the survey were analyzed with the SPSS program.

THE CONCEPT OF PRIVACY AND ONLINE PRIVACY

The fact that the concept of privacy has a different meaning for each individual makes it difficult to define the concept of privacy because they vary across people, cultures and periods. In the literature, the concept of privacy is defined as *"protection from unwanted approaches of others"* cited in Belsey and Chadwick, (2011). It is also defined as follows: "privacy, which is based on the protection of each individual's private life, personal information and body information freely by that individual, is the right to keep private life confidential" (Kütükoğlu, 2021, s. 124). It corresponds to the situation in which the individual is free to decide to disclose information about herself, which does not cause any harm when known to others and which the individual perceives to be private to herself. When defining the concept, it should be underscored that the concept of privacy will vary according to time and place (Çetin, 2015, s. 781). The concept of privacy is essentially the freedom of the individual to choose with whom he/she can share his/her information and details.

Giddens (2010, s. 123) remarked that the concept of privacy has undergone a historical transformation, Habermas (2022, s. 257) underscored that this transformation may be experienced differently in individuals, cultures and societies and the meaning attributed to privacy may differ. Çelikoğlu (2008, s. 24) emphasizes the importance of the impact of four factors in changing the concept of privacy:

- Developments in information and communication technologies,
- The effort to create a society consisting of individuals who care about freedom as a result of the changes in family and business life with the Industrial Revolution and the increase in education level,
- The fact that individuals have the chance to follow technological developments more closely with the increase in their purchasing power and the development of product marketing techniques as a result of economic improvement, and
- The employment of surveillance techniques to ensure the public interest thanks to developments in the political field.

This study focuses on the concept of online privacy, which has found its place in the literature as a result of the developments in communication technologies. With technological developments, users meet many needs such as obtaining information from the digital world, having fun, and communicating. Unlimited data flow offered to users and content sharing left to user control have led to the secrecy underpins the basis of privacy to be undermined and affected the limits of privacy. Individuals are anxious about the limits of privacy concept, which is defined as *"something that should be and remain secret"* (Aslanyürek, 2016) and which has emerged with the developments in communication technologies. The fact that the control over how much information the individual will share about his/her own life was breached by these technologies reminds the following statement by Bauman (2017: 33): *"Whether we realize it or not, whether we like it or not"* the problem of this age is privacy (Demirel, 2021). Online privacy can be defined as *"a concept related to the privacy and security level of personal information shared consciously or unconsciously on the Internet"* Aslanyürek (2016). Online privacy also refers to the control of individuals over the extent other users can access online personal data, as well as having the option to make private data totally inaccessible (Milne, Rohm, & Bahl, 2004). Today, besides the affordances they offer to their users, internet technologies bring along the risk of negative experiences such as violations of users' privacy, which requires the users are to be cautious. (Karaarslan, Eren, & Koç, 2014) state that the online footprints of the users are followed as soon as they get connected to the internet. Although individuals take precautions during use, their activities in these environments can be monitored and thus their privacy can be violated.

Each step taken by the internet user online leads to a data collection process about him/herself. In the digital environment, it is normal for individuals to have a concern about the violation of their privacy and to have questions about how cookies in the online environment will affect their future lives.

However, studies conducted on level of such awareness, Topbaş ve Gazi (2016), show that individuals have low awareness. In addition, although individuals are aware that the privacy in online environments is violated, it is also possible that the threat posed by this situation is ignored. As (Jordaan & Heerden, 2017) stated, users can sometimes disclose their own personal information.

In brief, it is a fact that individuals do not fully understand or care enough about the privacy risks they face in the online world. This can cause us to question the extent to which online security and privacy affect individuals' behavior.

METHODOLOGY AND FINDINGS

The main purpose of this research is to examine the online privacy awareness levels of students at Gümüşhane University Faculty of Communication and to reveal possible significant differences in terms of this awareness across different demographic variables. In the data collection process, feedback was received from the participants using the face-to-face survey technique. Within the scope of the study, data were collected from 282 students over the age of 18 studying at Gümüşhane University Faculty of Communication using the purposeful sampling method.

Before the study, a pilot test was administrated to 50 participants to test the comprehensibility of the statements in the questionnaire form and to identify the statements that were not understood by the participants and remove them from the questionnaire form. In line with the results of this pilot test, the final version of the questionnaire form was obtained and administrated to the students studying in the Public Relations and Publicity (PRP), Radio Television and Cinema (RTC) and Journalism (JRN) departments of the faculty. The questionnaire consists of two parts.

In the first part of the questionnaire, in addition to demographic information such as gender, age, and the department they study, there are questions about the purposes for which they use social media, daily time spent on social media, and the social media platforms they prefer most. These questions aim to determine students' social media usage habits and preferences.

The second part of the questionnaire consisted of the "Online Privacy Awareness Scale" (OPAS). This scale was developed by Korkmaz et al. (2021). This scale consists of 17 five-point Likert type items and 3 factors. The first factor of the scale, "Attention", consists of 7 items. The second factor, "Security", consists of 5 items and the third factor, "Communication and Sharing" consists of 5 items. Three factors in the scale explain 47.709% of the total variance. The reliability coefficient of the entire scale (Cronbach's) was calculated as .794. As for the reliability analysis of the factors, Cronbach's Alpha for each of the three factors was found to be as follows: Attention= .776, Security = .696, and Communication and Sharing= .713.

As the study follows a cross-sectional design, the generalizability of the results is limited in terms of time. In addition, another limitation of the study is that it was carried out only with the participation of Gümüşhane University Faculty of Communication students. Therefore, the findings do not include students from other universities. The data for the study were collected between May 27 and June 7, 2024. The study seeks to answer the following questions:

1. What is the level of online privacy awareness of the participants in the study?
2. Does the level of online privacy awareness differ significantly according to some demographic variables and departments?
3. How do the participants' scores in sub-dimensions of online privacy awareness relate to each other?

Skewness and kurtosis coefficients were examined to determine whether the data obtained in the study showed normal distribution. The fact that the skewness and kurtosis values are in the range of -2 to +2 indicates that the data are compatible with normal distribution (Mallery & George, 2010). In line with these results, parametric tests were used in the research.



Percentage and frequency analyses were used to analyze the demographic characteristics of the participants in the study. Independent samples t-test and ANOVA tests were employed to examine the online privacy awareness levels of the participants according to demographic variables. In the ANOVA analysis, the LSD post hoc test was applied to identify the source of differences observed between the groups. In addition, Pearson Correlation analysis was performed to determine the direction and strength of the relationships between the sub-dimensions of the Online Privacy Awareness scale: "Attention, Security, Communication, and Sharing."

Ethics Statement: The approval of the Ethics Committee was obtained with the decision of the Scientific Research and Publication Ethics Committee of the Rectorate of Gümüşhane University dated 30.05.2024 and numbered 2024/5.

Findings of the Study: The finding with regard to the gender, age, departments, frequency of social media use, reasons for social media use and the most frequently used social media tools are presented in the table below.

The finding with regard to the gender, age, departments, frequency of social media use, reasons for social media use and the most frequently used social media tools are presented in the table below.

Table 1. Distribution of Demographic Information of the Participants

| Overview of the Participants (N = 282) | | | |
|--|-------------------|-----------|------------|
| | | Frequency | Percentage |
| Gender | Female | 144 | 51,1 |
| | Male | 138 | 48,9 |
| Age | 18-21 | 71 | 25,2 |
| | 21-24 | 183 | 64,9 |
| | 25% and above | 28 | 9,9 |
| Department | PRP | 102 | 36,2 |
| | RTC | 85 | 30,1 |
| | JRN | 95 | 33,7 |
| Frequency of use | Less than 1 hour | 7 | 2,5 |
| | 1-3 hours | 120 | 42,6 |
| | 4-6 Hours | 106 | 37,6 |
| | More than 6 hours | 49 | 17,4 |

According to Table 1, 51,1% of the participants were female and 48,9% were male students. When the gender distribution is examined, it can be said that the students participating in the study are represented in a relatively balanced way on the basis of gender. As for age distribution, it is seen that the majority of the participants are between the ages of 21 and 24. The distribution of the departments in which the participants study is as follows: 36,2% of them attend the Department of Public Relations and Publicity, 33,7% of them attend the Department of Journalism and 30,1% of them attend the Department of Radio, Television and Cinema. When daily time the participants spent on social media daily are examined, 42,6% stated that they use social media for 1 to 3 hours, 37,6% use it for 4 to 6 hours, 17,4% use it for more than 6 hours and 2,5% use it for less than 1 hour.

The findings concerning the reasons the participants use social media are presented in Table 2.



Table 2. Reasons for Using Social Media

| Reasons for using social media (N=839) | Frequency | Percentage |
|--|-----------|------------|
| Keeping up-to-date | 221 | 26,3 |
| To have fun | 186 | 22,2 |
| Communicating with my acquaintances | 151 | 18,0 |
| Sharing my ideas - content generation | 80 | 9,5 |
| To spend free time | 135 | 16,1 |
| Meet people with common interests | 37 | 4,4 |
| Protesting and criticizing | 29 | 3,5 |

The participants were informed in writing in the form that they could mark more than one option for the questions whose results are reported in Table 2 and Table 3. Therefore, the number "N" is different. While 26,3% of the participants prefer to use social media to be aware of current developments, 22,2% use it to have fun, 18% use it to communicate with their acquaintances, and 16,1% to use it to spend free time. On the other hand, 3,5% of the participants use social media to protest and criticize, 4,4% use it to meet people with common interests, and 9,5% use it to share their ideas and produce content.

The findings with regard to the most frequently used social media tools are presented in Table 3.

Table 3. Distribution of Social Media Tools

| Social media tools (N=839) | Frequency | Percentage |
|----------------------------|-----------|------------|
| Instagram | 267 | 41,1 |
| X | 99 | 15,3 |
| Facebook | 26 | 4,0 |
| YouTube | 159 | 24,5 |
| TikTok | 70 | 10,8 |
| Pinterest | 24 | 3,7 |
| LinkedIn | 4 | 0,6 |

According to Table 3, 41,1% of the students participating in the study frequently use Instagram, 24,5% use YouTube, and 15,3% use X platform. The least used social media platforms are Facebook, Pinterest and LinkedIn.

Table 4. Results of Factor Analysis

| Factors | 1 | 2 | 3 | Cronbach's Alpha |
|--|------|------|---|------------------|
| Security | | | | ,825 |
| 1. I check the security certificates and data encryption methods of internet sites and mobile applications. | ,809 | | | |
| 2. I pay attention to what information the plugins in my web browser will access | ,787 | | | |
| 3. When installing an application on my mobile device, I pay attention to which permissions the application requests. | ,768 | | | |
| 4. I check the security of the websites I visit. | ,752 | | | |
| 5. I have information about the cookie files used by internet sites. | ,637 | | | |
| Communication and Sharing | | | | ,806 |
| 6. I share other people's information, pictures, videos, etc. online without needing to ask for permission. | | ,813 | | |
| 7. I share my personal information (address, date of birth, age, job, phone, etc.) with people I do not know in online environments. | | ,761 | | |
| 8. I communicate with people I do not know in online environments. | | ,758 | | |
| 9. I allow people I don't know to follow me or become friends in online environments. | | ,736 | | |



10. I share screenshots of my correspondence with my friends or relatives without the need for permission. ,684

Attention

11. I check the privacy settings and notifications of the online platforms I use. ,687

12. I set the privacy settings of my account in the online environments I use (social networks, shopping sites, games, etc.). ,799

13. I make sure that the passwords I use in online environments are strong (using uppercase and lowercase letters, numbers, special characters and at least 8 characters). ,592

| | | | |
|---------------------------------|----------------------------------|--------|--------|
| Eigenvalue | 3,022 | 2,865 | 1,857 |
| Variance Explained | 23,248 | 22,036 | 14,283 |
| Total Variance Explained | 59,567 | | |
| KMO | 0,795 | | |
| Barlett Test | 1245,395 (sd. 78; p= ,000) | | |
| Cronbach's Alpha | ,751 | | |

The data obtained from Online Privacy Awareness Scale composed of 17 items were subjected to Exploratory Factor Analysis. As a result of this analysis, the factor loads of the following statements, which existed in the original form of the scale, "I understand whether the content of the messages I receive from e-mails and social networks is reliable," "I am aware that the information I share online can be used by companies, government agencies or hackers," "I understand whether the messages or e-mails from people I do not know in online environments pose a security risk" and "I am aware that the information I share on online platforms can be used by malicious people" were found to be below 0.50 or they were overlapping. Therefore, these items were excluded from the analysis because their factor loads. The analysis continued with the remaining 13 items. A factor load value of 0.45 or higher is a good criterion for selection (Büyüköztürk, 2009, s. 124). As a result, there factors (Security, Communication and Sharing and Attention) were obtained with the remaining 13 items. The items in the "Communication and Sharing" factor are positive in terms of structure and negative in terms of meaning. Therefore, the items in this factor were inverted and then coded during the analysis.

The eigenvalue of the factors obtained is expected to be greater than 1. As seen in Table 4, the eigenvalue of the Safety factor is 3,022, the eigenvalue of the Communication and Sharing factor is 2,865, and the eigenvalue of the Attention factor is 1,857. The total variance explained by these factors is 59.567%. The explained variance rate is expected to be no less than 60%. However, according to some researchers, the minimum variance explanation rate is 50% (Coşkun, Altunışık, & Yıldırım, 2010, s. 273). According to the Bartlett test, a significant relationship was found between the variables subjected to factor analysis and the factor ($p = ,000$), Kaiser-Meyer-Olkin (KMO) = ,795. In other words, it is possible to say that the data are suitable for factor analysis and the construct validity of the factors is also ensured. KMO is expected to be higher than ,60 (Büyüköztürk, 2009, s. 126). According to the results of the factor analysis, the maximum weight level is ,809 and the minimum weight level is ,592. On the other hand, the Cronbach Alpha coefficient of the scale is ,751. Thus, the scale is quite reliable (Akgül & Çevik, 2005, s. 436). The Cronbach Alpha coefficient of the safety factor is ,825 and the explained variance rate is 23,248%. The Cronbach Alpha coefficient of the Communication and Sharing factor is ,806 and the explained variance rate is 22,036%. The Cronbach Alpha coefficient of the attention factor is ,687 and the explained variance rate is 14,283%. According to these results, it is seen that the factors in the scale are also quite reliable.



Table 5. Scale Item Scores

| Factors | Items | \bar{X} | SD |
|----------------------------------|--|-----------------------------|-------------|
| Security | 1. I check the security certificates and data encryption methods of internet sites and mobile applications. | 3,68 | 1,32 |
| | 2. I pay attention to what information the plugins in my web browser will access | 3,71 | 1,24 |
| | 3. When installing an application on my mobile device, I pay attention to which permissions the application requests. | 3,70 | 1,14 |
| | 4. I check the security of the websites I visit. | 3,68 | 1,27 |
| | 5. I have information about the cookie files used by internet sites. | 3,21 | 1,36 |
| | Mean | 3,59 | 1,01 |
| Communication and Sharing | 6. I share other people's information, pictures, videos, etc. online without needing to ask for permission. | 4,40 | 1,12 |
| | 7. I share my personal information (address, date of birth, age, job, phone, etc.) with people I do not know in online environments. | 4,22 | 1,27 |
| | 8. I communicate with people I do not know in online environments. | 3,89 | 1,31 |
| | 9. I allow people I don't know to follow me or become friends in online environments. | 3,81 | 1,34 |
| | 10. I share screenshots of my correspondence with my friends or relatives without the need for permission. | 4,14 | 1,28 |
| | Mean | 4,09 | ,95 |
| Attention | 11. I check the privacy settings and notifications of the online platforms I use. | 3,60 | 1,27 |
| | 12. I set the privacy settings of my account in the online environments I use (social networks, shopping sites, games, etc.). | 3,87 | 1,26 |
| | 13. I ensure that the passwords I use in online environments are strong (using uppercase and lowercase letters, numbers, special characters, and at least 8 characters). | 4,10 | 1,19 |
| | Mean | 3,85 | ,97 |
| Criteria Mean | | 3,84 | ,64 |

(1) Never, (2) Rarely, (3) Occasionally, (4) Often, and (5) Always

The findings in Table 5 reveal how the participants responded to the statements in the Online Privacy Awareness Scale. When evaluated in general, it can be said that the online privacy awareness levels of the participants in the study are high. In other words, it can be stated that the participants are aware of online privacy. While the most important factor in online privacy awareness is the "Communication and Sharing" dimension, the least important one is the "Security" dimension. The statements in online privacy in the security factor with the highest level of awareness are "I pay attention to what information the plugins in my web browser will access" and "I pay attention to what permissions the application requests when installing an application on my mobile device", respectively. The item with the lowest awareness score in this factor is "I have information about the cookie files used by websites". The items in the "Communication and Sharing" factor are positive in terms of structure and negative in terms of meaning. Therefore, the items in this factor were inverted and then coded during the analysis. Accordingly, the statements in this factor receiving the highest level of awareness scores are: "I share information, pictures, videos, etc. belonging to others online without the need for permission" and "I share my personal information (address, date of birth, age, job, phone, etc.) with people I do not know in online environments". In other words, the participants stated that they did not actually agree with these statements. The statement with the lowest level of awareness score in this factor is: "I allow people I don't know to follow me or be friends in online environments". As for the attention factor, the statement



with the highest awareness score is "I ensure that I use strong passwords in online environments (using uppercase and lowercase letters, numbers, special characters and at least 8 characters). The statement the participants indicated to be least aware of in this factor is "I check the privacy settings and notifications of the online platforms I use".

Table 6. Comparison of Online Privacy Awareness Dimensions by Gender

| Dimensions | Gender | N | \bar{X} | SD | t-value | Sig. |
|---------------------------|-------------|-----|-------------|------|---------|-------------|
| Security | Female/Male | 144 | 3,47 | 1,04 | -1,95 | ,051 |
| | | 138 | 3,71 | ,97 | | |
| Communication and Sharing | Female/Male | 144 | 4,36 | ,78 | 5,03 | ,000 |
| | | 138 | 3,81 | 1,03 | | |
| Attention | Female/Male | 144 | 3,90 | ,90 | ,94 | ,346 |
| | | 138 | 3,79 | 1,05 | | |

Table 6 shows the sub-dimensions of the Online Privacy Awareness Scale and the comparison of the students participating in the study in terms of gender. Accordingly, a statistically significant difference was found between the mean scores in the "Communication and Sharing" dimension in terms of gender ($p = ,000$). Thus, it is possible to say that female students have a high level of awareness of their online privacy in the dimension of communication and sharing compared to male students. On the other hand, there is no statistically significant difference in terms of gender in the other sub-dimensions.

Table 7. Comparison of Online Privacy Awareness Dimensions by Age Groups

| Sub-Dimensions | Age | N | Mean | SS | F | p | Significant Difference |
|---------------------------|----------------|-----|------|------|------|------|------------------------|
| Security | A-18-21 | 71 | 3,65 | 1,00 | ,430 | ,651 | |
| | B-21-24 | 183 | 3,59 | ,99 | | | |
| | C-25 and above | 28 | 3,44 | 1,20 | | | |
| Communication and Sharing | A-17-21 | 71 | 4,20 | ,74 | 1,55 | ,214 | |
| | B-21-24 | 183 | 4,01 | 1,06 | | | |
| | C-25 and above | 28 | 4,27 | ,62 | | | |
| Attention | A-17-21 | 71 | 3,95 | ,82 | 1,29 | ,276 | |
| | B-21-24 | 183 | 3,85 | ,95 | | | |
| | C-25 and above | 28 | 3,60 | 1,40 | | | |

Table 8. Comparison of Online Privacy Awareness Dimensions by Department

| Sub-Dimensions | Department | N | Mean | SS | F | p | Significant Difference |
|---------------------------|------------|-----|------|------|------|------|------------------------|
| Security | A-PRP | 102 | 3,57 | ,99 | ,323 | ,724 | |
| | B-RTC | 85 | 3,66 | 1,05 | | | |
| | C-JRN | 95 | 3,54 | 1,01 | | | |
| Communication and Sharing | A-PRP | 102 | 4,22 | ,86 | 2,01 | ,135 | |
| | B-RTS | 85 | 3,94 | 1,12 | | | |
| | C-JRN | 95 | 4,07 | ,86 | | | |
| Attention | A-PRP | 102 | 3,97 | ,96 | 1,14 | ,321 | |
| | B-RTC | 85 | 3,81 | ,95 | | | |
| | C-JRN | 95 | 3,77 | 1,01 | | | |

Table 7 and Table 8 show the results of the ANOVA analysis conducted to compare the online privacy awareness sub-dimensions of the participants in terms of age and department. According to the results

of the analysis, no statistically significant difference was found in the mean scores in the online awareness sub-dimensions in terms of age and department of the participants ($p > ,05$).

These findings show that age and department variables do not have a determining effect on the online privacy awareness levels of the participants in the study.

Table 9. Correlation Analysis Between Factors

| | Security | Communication and Sharing | Attention |
|---------------------------|------------|---------------------------|-----------|
| Security | r 1 | -,049 | ,433 ** |
| | p | ,411 | ,000 |
| | n 285 | 282 | 282 |
| Communication and Sharing | r- ,049 | 1 | ,090 |
| | p ,411 | | ,131 |
| | n 282 | 282 | 282 |
| Attention | r ,433 * * | ,090 | 1 |
| | p= ,000 | ,131 | |
| | n 282 | 282 | 282 |

* * Correlation is significant at 0.01 level.

Table 9 shows the results of the correlation analysis between factors. According to Table 9, there is a significant ($p= ,000$) positive and moderate relationship between the safety factor and attention ($r = ,433$) factors. In other words, it can be said that as the attention dimension, which is one of the online privacy awareness dimensions of the participants in the study, increases, the security dimension may also increase. On the other hand, there is no statistically significant relationship between the other factors.

CONCLUSION

This study was conducted to measure the online privacy awareness of university students and to examine how this awareness differs according to various demographic variables. With this aim in mind, the data for the study were collected from 282 students over 18 studying at Gümüşhane University Faculty of Communication between May 31 and June 11, 2024, through the purposeful sampling method.

In this study, online privacy awareness levels of the participants, the relation between online privacy awareness and demographic characteristics and the department they study in, and the relationship between the sub-dimensions of online privacy awareness were examined.

In line with the data obtained from the participants, it was determined that the online privacy awareness levels of university students were generally high. This finding is similar to the results of the studies conducted by Kalaman (2017), Korkmaz et al. (2021) Karadaş and Kara (2021) and Avcı and Kayıran (2023). According to these findings, it can be said that online privacy awareness is a common phenomenon among university students. This awareness can also be associated with the rapid development of digital technologies and increasing concerns about the protection of personal data online.

In the study, data on the relationship between the online privacy awareness level and the demographic characteristics and the department they study in were also evaluated. When considered in terms of gender, a significant difference has been revealed in the dimension of ‘communication and sharing’, which is one of the dimensions of online privacy awareness. To be more specific, it was determined that female students had a higher level of awareness about their online privacy in the ‘communication and sharing’ dimension compared to male students. It was revealed that there was not a significant difference in terms of gender in the dimensions of safety and attention. When the studies in the literature are examined, it is seen that some studies reported significant differences in terms of gender in online privacy awareness (O’Neil, 2001; Tifferet, 2019; Korucu & Gürkez, 2019; Kaya & Yaman, 2022; Yazgan , 2022) while others reported no significant difference in terms of gender ((Karadaş & Kara, 2021); (Bolat, 2022); (Avcı & Kayıran, 2023). Previous research reported significant differences particularly in favor of females. Based on these findings, it can be said that online privacy awareness differs according to gender. The fact that females in particular exhibit higher awareness level in the



"communication and sharing" dimension reveals that they are more sensitive to their privacy in online platforms. This may indicate that females tend to be more careful and cautious when sharing their personal information. However, the lack of gender difference in terms of "safety" and "attention" dimensions suggests that these dimensions of awareness develop in similar ways regardless of gender. The fact that there are different results on this subject in the studies in the literature suggests that the research findings may vary depending on different sample groups, cultural factors or scales used in the study.

As a result of the analysis of online privacy awareness dimensions in terms of age and department, it has been revealed that there is no significant difference in online privacy awareness dimensions in terms of age and department studied. However, some studies report different results. When considered in terms of age, Zeissig et al., (2017), De Wolf (2019), Karadaş and Kara (2021) and Goyeneche et al., (2024) revealed that there was a significant difference in privacy awareness in terms of age. The findings of this study diverge from the results of some previous research. To be more clear, some studies conclude that online privacy awareness increases as age increases, while others reach to the conclusion that age is not a determinant. In other words, the age factor may not be a fundamental determinant of online privacy awareness.

Considering the relationship between online privacy awareness and the department of study, the result of this study and the result of the study conducted by Karadaş and Kara (2021) coincide. However, in the study conducted by May and Sébastien (2011), it was concluded that online privacy awareness significantly differed in terms of department, in other words online privacy awareness levels of students majoring in different subjects were different. In line with all this information, it can be said that there is not always a clear and consistent relationship or difference in online privacy awareness in terms of age and department.

When the relationships between the sub-dimensions of online privacy awareness were examined, it was determined that there was a positive and significant relationship between the "attention" and "security" dimensions. Based on this finding, it was concluded that as individuals' awareness in the attention dimension increased, their awareness in the safety dimension also increased. However, it was found that "communication and sharing" dimension was significantly related neither with the "attention" nor with the "security" dimension. These findings suggest that as respondents become more aware of online security, their tendency to exercise caution may increase. As a result of this research, it can be said that the concepts of safety and attention support each other in online environments, and individuals who gain awareness about safety tend to be more careful.

According to the results of the current study, online privacy awareness of university students is generally high and this awareness is partially related to demographic variables such as gender, age and department. While it is noteworthy that especially female had a higher level of awareness than males in the "communication and sharing" dimension, no consistent relationship was found between awareness and factors such as age and department. These results reveal that online privacy awareness may differ depending on the gender of individuals, but this difference is not always evident in other demographic variables such as age and department. Moreover, the positive relationship between attention and security dimensions indicates that online security awareness progresses in parallel with being careful in online environments. However, the lack of a significant relationship between the "communication and sharing" dimension and other dimensions of awareness can be interpreted to indicate that different dimensions of online privacy are perceived differently for individuals and that not every dimension is considered equally important.

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