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Examining Students' Attitudes on the Use of Social Networks for Educational Purposes

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Abstract

This study aims to determine the attitudes of university students towards the use of social networks for educational purposes and to examine the differentiation of these attitudes by gender, type of education, department, grade point average, the most used social network and the time spent on social networks during the day. This study uses a quantitative research approach using a survey model. The population consists of 534 vocational school students at a state university in the Eastern Anatolia Region in the 2021-2022 academic year. The sample consists of 351 students, 131 female and 220 male, determined by simple random sampling method. "Personal Information Form" and "Attitude Scale Towards the Use of Social Networks for Educational Purposes – ASTUSNEP" developed by Kesici (2018) were used as data collection tools. The analyses results showed that the students' attitudes towards using social networks for educational purposes were in the high-level "very positive" value range. When the means of the sub-dimensions of ASTUSNEP were evaluated, the behavior sub-dimension was in the high "positive" value range, the knowledge sub-dimension was in the very high "very positive" value range, and the emotion sub-dimension was in the "medium" value range. On the other hand, while there were statistically significant differences between students' attitudes towards using social networks for educational purposes and multiple variables (gender, type of education, department, grade point average, most used social network), there was no statistically significant difference between the time spent on social networks during the day.

Keywords: Social networks, attitude, university students

Introduction

In the 21st century, when the fourth industrial revolution is experienced, one of the main goals of education systems is to raise individuals who can adapt to the rapidly developing technological world and selectively acquire the necessary gains (Trilling & Fadel, 2009). As in other fields including health, transportation, communication, etc., significant changes have been experienced in the field of education as well as (Gülbahar, 2018) and rapid developments in digital technologies (computer, smart phone, tablet, internet, etc.) have brought along the opportunity for students to easily take their learning environments out of school (Epçaçan & Pesen, 2017); Uca – Güneş, 2016). Thus, students can interact with each other or information sources at any time and place they want, and they can perform learning activities (Gülbahar, 2018). In other words, students can frequently benefit from technological opportunities, especially social networks, both in accessing new information and in structuring knowledge (Orhan-Göksün & Aşkım-Kurt, 2018). It is seen that students use social networks from a young age to communicate, meet their social needs on virtual platforms and support their learning processes (Baran, 2014; Marshall, 1999). The concept of social network, which was first used by Barnes in 1954 (Aksüt et al., 2011), can be defined as activities carried out through technological hardware and software that allow individuals to socialize (Hamid et al., 2009). Another definition is that social networks are software that allow individuals to share their ideas and/or information via the internet to achieve common goals (Bedir, 2016; Preeti, 2009). In the current era, with the widespread use of wireless internet, social networks enable all kinds of written, visual, and auditory information to be shared among many people by using technologies such as computers, tablets, and smart phones (Epçaçan & Pesen, 2017). According to a study conducted by We are social and Hootsuit in 2019, the most preferred social networks in Turkey can be listed as Youtube, Instagram, WhatsApp, Facebook, Twitter, Messenger, Skype, Snapchat, Linkedin, Pinterest, Tmblr, Wechat, Reddit, Line and Badoo (We are social & Hootsuit, 2019). The top ten most preferred social networks in Turkey in 2019 and their usage rates are shown in the chart (Figure 1).

As shown in Figure 1, the most preferred social network in Turkey in 2019 is YouTube with 92% which is followed by Instagram (84%), WhatsApp (83%), Facebook (82%), Twitter

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(58%), Messenger (57%), Skype (31%), Snapchat (31%), LinkedIn (30%), and Pinterest (28%). In this context, it was deemed appropriate to provide information about the most preferred applications that are YouTube, Instagram, WhatsApp, Facebook, and Twitter.

YouTube: YouTube, which offers its users the opportunity to share videos, is one of the most used web pages in the world (Mayfield, 2008). YouTube, which has a daily viewing rate of approximately 1 billion, is a digital platform that provides services in 76 languages and has approximately 1 billion active users (Köse & Çal, 2012; Sarsar, 2018). When evaluated in terms of education-teaching processes, YouTube provides students with videos related to lessons and subjects, makes a very large pool of course material free to access, creates an environment for discussion among students by commenting on the videos, helps to personalize the published learning materials, and facilitates learning outside the classroom (Bedir, 2016; Burgess & Green, 2009; Burke & Snyder, 2008; Sarsar, 2018; Zafar, 2016).

Instagram: With its main feature of sharing stories (contents that are automatically removed within 24 hours) and photos (Atherton, 2018), Instagram provides individuals the opportunity to comment and discuss. Since Instagram is a digital platform focused on visual sharing, this feature should be used in education processes (Sarsar, 2018). Course topics and materials can be shared visually via Instagram (AlGhamdi, 2018). In addition, student assignments or practice activities and related comments and discussions can be exhibited (Hudson, 2016; Kesici, 2018).

WhatsApp: It is a messaging platform developed especially for smartphones. With this application, videos, audios, images, documents, etc. can be shared anywhere with internet (www.whatsapp.com.tr). These features and high awareness on WhatsApp increase its potential to be preferred in educational processes day by day (Çetinkaya, 2017). Additionally, with Whatsapp, an opportunity for fast, easy, and high-quality communication can be created between students, and between student-teacher and families (Balcı & Şahin, 2018).

Facebook: Developed by Mark Zuckerberg in 2004 for a limited number of users (Boyd & Ellison, 2007; Peluchette & Karl, 2010), Facebook a digital platform that allows for mutual communication according to users' permission preferences, and that provides access to information including voice, text, picture, video, address, personal information, friends, etc. (Gonzales & Vodicka, 2010; Gülbahar, 2018). In-school and out-of-school learning can also be supported by adapting Facebook, which is mostly used for communication and entertainment purposes (Coklar, 2017), to educational processes, thus enabling students to acquire the expected behaviors faster and easier (Aaen & Dalsgaard, 2015; Gregory, et al., 2014; Madge, Meek, Wellens, & Hooley, 2009).

Twitter: Twitter was developed by Evan Williams, Jack Dorsey, and Biz Stone in 2006 with the emergence of the concept of "microblogging" (Gülbahar, 2018; O'Reilly & Milstein, 2009). In the first years, Twitter allowed to write a maximum of 140 characters but later updated this feature to 280 characters (Kesici, 2018). Twitter is a communication platform where individuals can freely share their thoughts, feelings, and ideas and comments on any subject (Odabaşı et al., 2012). Studies show that Twitter is used in educational processes including reporting assignments, cooperation and communication between students and students and teachers, sharing course topics and materials, learning languages, following current developments, presenting opinions, and conducting discussions (Bledsoe, et al., 2018; Gülbahar, 2018; Java, et al., 2007; Messner, 2009; Rosell-Aguilar, 2018; Sarsar, 2018).

The study conducted by We are social and Hootsuit in Turkey in 2019 shows that especially new generations use social networks increasingly as indicated in the graphic (We are social & Hootsuit, 2019).

As shown in Figure 2, while the rate of social network use under the age of 24 is 29%, the rate of use of social networks under the age of 34 is approximately 62%. The rate of social network use for those aged 55 and over is approximately 7%. As shown, the use of social networks is quite intense, especially at the age level (18-24/25-34) corresponding to higher education.

Social networks, which are structured as a membership system and enable their users to exchange information on various subjects, generally contribute to the communication process in education (Çoklar, 2017). In addition, social networks also support educational and training processes in

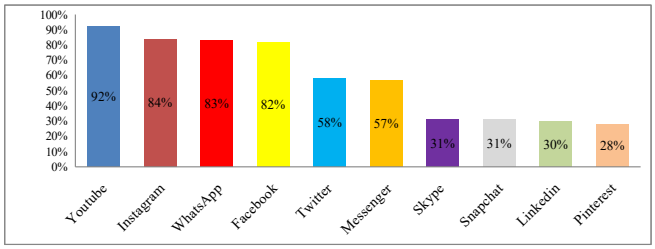

Fig. 1: Distribution of Social Networks Preferred by Social Network Users in 2019 (Top 10) (Adapted from We are social & Hootsuit, 2019).

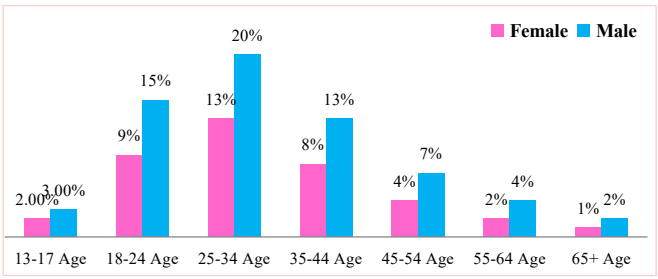

Fig. 2: Distribution of Social Network Users by Age (Adapted from by We are social & Hootsuit, 2019).

areas including creating a learning environment, sharing visual materials, and conducting collaborative studies (Sarsar, 2018). Social networks can enable students to access information, use and structure information, cooperate with other students at any time and place, and easily adapt to educational processes at a low cost (Hargreaves, 2002). However, first, students should have a positive attitude towards social networks and their use of social networks for educational purposes. One of the main factors that determine the frequency of any behavior is attitude (İnceoğlu, 2010).

The Turkish Language Institution defines attitude as the way of perceiving any event, situation, object, or element (www.sozluk.gov.tr). The concept of attitude, which means "ready to act" when translated into Turkish from its Latin origin (Arkonaç, 2001), is a degree of positive or negative perception towards an object (Thurstone, 1967). Attitude consists of three elements: cognitive, affective, and behavioral (Krech, et al., 1983). Knowing that walnuts are beneficial can be explained as a cognitive element, liking the taste of walnuts as an affective element, and eating a handful of walnuts every day can be explained as a behavioral element. Knowing the attitudes of individuals about any subject can allow predicting and even controlling their behaviors (Eren, 2001; İnceoğlu, 2010). In other words, if the attitudes of individuals towards any situation are known, it can be possible to know beforehand the behavior they will exhibit and thus, to keep this behavior under control (Çöllü & Öztürk, 2006; Gülbahar, 2018). For this reason, by determining the attitudes of students towards the use of social networks for educational purposes, their attitudes can be positively affected or changed (Kesici, 2018; Lee, Hong & Ling, 2002). Therefore, students' behaviors of using social networks for educational purposes can be improved.

Purpose of the Study

With the technological developments in the 21st century, the importance of the concept of lifelong learning is increasing (Gülbahar, 2018). Many studies emphasize the importance of using social networks, one of the innovations brought by technology, for educational purposes, like other educational technologies, to keep up with the era and to access constantly developing and changing information (Aaen & Dalsgaard, 2015; AlGhamdi, 2018; Bedir, 2016; Bledsoe, Harmeyer & Wu, 2018; Burgess & Green, 2009; Burke & Snyder, 2008; Çoklar, 2017; Gregory, et al., 2014; Gülbahar, 2018; Hudson, 2016; Java, et al., 2007; Kesici, 2018; Madge, et al., 2009; Messner, 2009; Rosell-Aguilar, 2018; Sarsar, 2018; Zafar, 2016). For this reason, determining the attitudes of individuals towards the use of social networks for educational purposes may allow them to predict and correct their behaviors in this aspect. Therefore, the aim of this study is to determine the attitudes of university students towards the use of social networks for educational purposes. Thus, offering recommendations on the subject can contribute to helping students to use social networks more actively and to realize both formal and informal learning.

The main purpose of this study is to examine whether the attitudes of vocational school students at a state university in the Eastern Anatolia Region on the use of social networks for educational purposes differ by gender, type of education, department, grade point average, the most used social network, and the time spent on social networks during the day. The research question guiding this study is :

1. What is the level of attitudes of vocational school students towards using social networks for educational purposes?". Other research questions developed to answer this research question in detail are as follows:
2. Is there a significant difference between the attitude levels of vocational school students towards using social networks for educational purposes and their gender?
3. Is there a significant difference between the attitude levels of vocational school students towards the use of social networks for educational purposes and the type of education?
4. Is there a significant difference between the attitude levels of vocational school students towards the use of social networks for educational purposes and their departments?
5. Is there a significant difference between the attitude levels of vocational school students towards the use of social networks for educational purposes and their grade point averages?
6. Is there a significant difference between the attitude levels of vocational school students towards using social networks for educational purposes and the type of social network they use the most?
7. Is there a significant difference between the attitude levels of vocational school students towards using social networks for educational purposes and the time they allocate to social networks during the day?

Method

Research Design

In this quantitative study, which is a type of research in which events or situations can be observed and measured objectively and the results can be expressed with numerical data (Creswell, 2012), a survey model was preferred. Survey model is research conducted with large populations using standardized data collection tools to determine characteristics such as interests, skills, and attitudes (Fraenkel & Wallen, 2006; Gliner, et al., 2015).

Population and Sample

The population of this study consists of 534 vocational school students enrolled at a state university in the Eastern Anatolia Region in the 2021-2022 academic year. As a result of scientific calculations (Burns & Bush, 2015; https://www.surveysystem.

com; Yazıcıoğlu & Erdoğan, 2004) with 95% confidence interval and 5% margin of error, the sample size (the minimum number of students to be reached in this study) was determined as 224. However, considering that some data may be missing or incorrectly collected, data were collected from as many students as possible which resulted in obtaining data from 351 students. While determining the sample size, simple random sampling method was used in which each individual is given an equal chance and the power to represent the universe is higher than the selected sampling methods (Bustami, et al., 2017; Büyüköztürk, et al., 2017; Gliner, et al., , 2015; Karadeniz, et al., 2019). Table 1 shows the population and sample.

Table 1: Population and Sample

Department / *COHORT*	*Daytime Ed.*	*Evening Ed.*	*TOTAL*
Logistics	91	---	91
Private Security and Protection	75	---	75
Child Development	122	125	247
Culinary Arts	46	---	46
Occupational Health and Safety	75	---	75
Cohort Total	409	125	534
Overall Total (Population)	409	125	
Sample Size (Minimum)	224		
Sample Size Reached	351		

Table 2: Demographics of the Sample

Variable		*n*	*%*
Gender	Female	131	62.7
	Male	220	37.3
Type of Education	Daytime Education	252	71.8
	Evening Education	99	28.2
Department	Child Development	173	49.3
	Private Security and Protection	44	12.5
	Culinary Arts	39	11.1
	Occupational Health and Safety	48	13.7
	Logistics	47	13.4
Grade Point Average (GPA)	2.00 and below	36	10.3
	2.01 – 2.50	30	8.5
	2.51 – 3.00	86	24.5
	3.01 – 3.50	103	29.3
	3.51 – 4.00	96	27.4
Social Network that is Used the Most	YouTube	74	21.1
	Facebook	44	12.5
	Instagram	127	36.2
	WhatsApp	106	30.2
Time Spent on Social Networks During the Day	Less than 1 hour	40	11.4
	1-2 hours	34	9.7
	2-3 hours	90	25.6
	More than 3 hours	187	53.3

Table 1 shows the distribution of the population according to departments and types of education, as well as the minimum sample size (224) to be reached and the sample size reached (351). Table 2 shows the distribution of the sample by gender, type of education, department, grade point average, the most used social network, and the time spent on social networks during the day.

As shown in Table 2, 62.7% of the sample was female, 37.3% was male students with 71.8% enrolled in daytime education, and 28.2% in evening education. 49.3% of the students are enrolled in the child development program, 12.5% in private security and protection, 11.1% culinary arts, 13.7% occupational health and safety, and 13.4% in logistics. 10.3% of the students have a GPA of 2.00 and below, 8.5% have a GPA between 2.01 and 2.50, 24.5% between 2.51-3.00, 29.3% between 3.01-3.50 and 27.4% have a grade point average between 3.51 and 4.00. In terms of the most used social network, 21.1% of the students use YouTube, 12.5% Facebook, 36.2% Instagram and 30.2% WhatsApp the most, and 11.4% of students use social networks for less than 1 hour, 9.7% for 1-2 hours, 25.6% for 2-3 hours and 53.3% for more than 3 hours a day. According to Table 2, more than half of the sample consists of female students are daytime education enrolled in the child development department. Additionally, more than half of the sample consists of students with a GPA over 3.01, the most preferred social network is Instagram, and more than half of the students spend more than 3 hours a day on social networks.

Data Collection Tool

In this study, "Personal Information Form" and "Attitude Scale Towards the Use of Social Networks for Educational Purposes – ASTUSNEP" were used to examine the differentiation status of students' attitudes towards using social networks for educational purposes in terms of various variables. The Personal Information Form, which consists of 6 questions, was used to obtain data on students' gender, education type, department, grade point average, the most used social network, and the time spent on social network use during the day. ASTUSNEP was finalized by Kesici (2018) in a scale development study conducted with 352 students. ASTUSNEP consists of 3 dimensions: "Behavioral Dimension (9 items) =1, 2, 3, 4, 5, 6, 7, 8, 9, Knowledge Dimension (7 items) =10, 11, 12, 13, 14, 15, 16, and Emotion Dimension (5 items) = 17, 18, 19, 20, 21". The scale does not include a negative item and is a 5-point Likert scale with the responses of "5-strongly agree", "4-agree", "3-partially agree", "2-disagree" and "1-strongly disagree". The means obtained from the scale are evaluated

as "very negative" between 1.00-1.80, "negative" between 1.81-2.60, "medium-" between 2.61-3.40, "positive" between 3.41-4.20, and "very positive" between 4.21-5.00. The fit indices obtained in the confirmatory factor analysis (CFA) completed by Kesici are as follows: $\chi 2$=482.72, sd=186, $\chi 2$/sd=2.305, RMR=.072, NFI=.935, TLI=.926, CFI=.934, RMSEA=.061. In a confirmatory factor analysis, >0.90 is an acceptable value for CFI, NFI and TLI (İlhan & Çetin, 2014; Kayapalı-Yıldırım & Ekinci, 2019; Marcoulides & Schumacher, 2001). Additionally, >0.50 is considered a very good value for RMR and RMSEA (Meydan & Şeşen, 2011; Schumacher & Lomax, 2004; Yıldırım & Naktiyok, 2017). The fact that $\chi 2$/sd value is less than 5 in CFA (Seçer, 2015) also shows that the fit indices of CFA performed by Kesici (2018) confirm the 3-dimensional structure of ASTUSNEP. The Cronbach Alpha internal consistency coefficients calculated by Kesici (2018) to determine the scale reliability were .90 for the Behavior Dimension, .87 for the Knowledge Dimension, .80 for the Emotion Dimension, and .93 for the whole scale. The evaluation intervals for the Cronbach - Alpha internal consistency coefficient determined by Özdamar (1997) are "$0.00 \leq \alpha \geq 0.40$ = unreliable, $0.40 \leq \alpha \geq 0.60$ = low reliability, $0.60 \leq \alpha \geq 0.80$ = highly reliable, $0.80 \leq \alpha \geq 1.00$ = strong reliability". Accordingly, it was found that the ASTUSNEP was reliable at a lower high level. Necessary permissions were obtained for the use and implementation of the data collection tool.

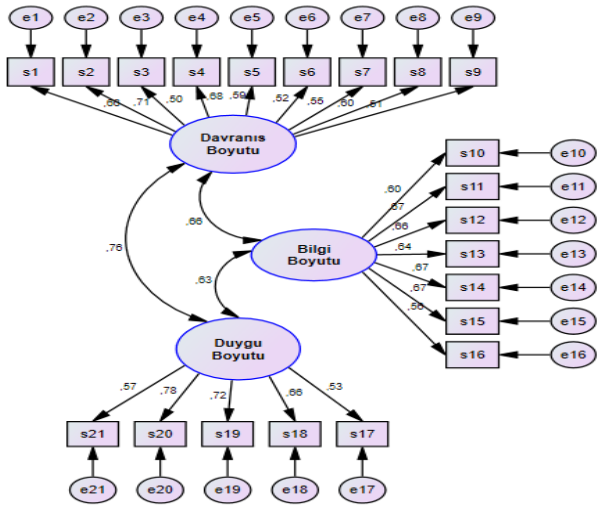

Fig. 3: Confirmatory Factor Analysis completed on ASTUSNEP

In this study, CFA, which examines the relationship between variables and latent variables (Naktiyok, 2019; Şencan, 2005), was completed to verify the factor structure of ASTUSNEP. The diagram presenting the CFA completed for ASTUSNEP is presented in Figure 3.

Item factor loads of sub-dimensions being .50 and above indicate that the items are significant for the scale (Jöreskop & Sörbom, 1996). The item factor loads were determined first, and item factor loads were .66, .71, .50, .68, .59, .52, .55, .60, .61 for the behavior dimension, .60, .67, .66, .64, .67, .67, .54 for the information dimension and .57, .78, .72, .66, .53 for the emotion dimension. The fact that the item factor loads are greater than .50 reveals that each item is significant for the scale. In addition, the fit indices found in the CFA and the reference intervals from the literature (Hooper, et al., 2008; İlhan & Çetin, 2014; Marcoulides & Schumacher, 2001; Özdamar, 2017; Schermelleh-Engel et al., 2003; Yıldırım & Naktiyok, 2017) are shown in Table 3.

When the measurement results obtained are compared with the reference values shown in Table 3 are compared, it was determined that the $\chi 2$/sd value was 2.135 and other fit indices were TLI=.91, RMSEA=.057, SRMR=.055, CFI=.91, GFI=.92, AGFI=.91, NFI=.90 which show that the fit indices are between the acceptable fit and good fit range, and thus, the construct validity of ASTUSNEP was confirmed.

In this study, Cronbach Alpha internal consistency coefficients for both three sub-dimensions and the whole scale were calculated to test the reliability of the scale. Table 4 shows the Cronbach Alpha internal consistency coefficients of ASTUSNEP.

Table 3: Fit Indices of ASTUSNEP in This Study

	Reference Value			
Index	*Good Fit*	*Acceptable Fit*	*Measurement*	*Result*
CMIN/DF	$0< \chi 2/sd \leq 3$	$3< \chi 2/sd \leq 5$	2.135	Good Fit
TLI	.95< TLI≤ 1	.90 < TLI≤ .94	.91	Acceptable
RMSEA	0 ≤ RMSEA ≤ .05	.05 ≤ RMSEA ≤ .08	.057	Acceptable
SRMR	0≤SRMR≤.05	0.05≤SRMR≤.10	.055	Acceptable
CFI	.95< CFI≤ 1	.90 < CFI≤ .94	.91	Acceptable
GFI	.95< GFI≤ 1	.90 < GFI≤ .94	.92	Acceptable
AGFI	.95< AGFI≤ 1	.90 < AGFI≤ .94	.91	Acceptable
NFI	.95< NFI≤ 1	.90 < NFI≤ .94	.90	Acceptable
Sd			186	

As seen in Table 4, the Cronbach Alpha internal consistency coefficient values were determined as .84 for the behavior dimension, .83 for the knowledge dimension, .81 for the emotion dimension, and .90 for the entire scale. These values show that the scale is highly reliable according to the evaluation intervals of Özdamar's (1997) Cronbach - Alpha internal consistency coefficient. In order to retest the reliability of ASTUSNEP, a split-half method was completed on the data. The values of the split-half test results are presented in Table 5.

The split-half test values were determined as .84 for the 1st half and .83 for the 2nd half. These results show that the ASTUSNEP is highly reliable. In addition, this study received ethics committee approval with the application number 44600 at the 27 meeting of the Social and Human Sciences Ethics Committee of Kafkas University, dated 04.01.2022.

Data Analysis

Statistical package programs were used in analyzing the research data. In order to decide on the statistical tests to be used in the analysis process, the normality of the data and the homogeneity of variance were evaluated first. Normal distribution of data and homogeneity of variance are necessary to conduct parametric tests (Büyüköztürk, 2018; Tezbaşarn, 1996). Otherwise, nonparametric techniques should be used (Burns & Bush, 2015; Turgut, 1997). Therefore, first, skewness-kurtosis values and Q-Q Plot, boxplot and histogram graphs were evaluated to determine the normality of the data, and then Kolmogorov – Smirnov and Shapiro – Wilk normality test values were checked. No abnormal distribution was observed in the graphics, and the skewness and kurtosis values were found to be between -1 and +1. Normality test results were determined as p>.05 as shown in Table 6. The skewness-kurtosis values between -1 and +1 and the Kolmogorov – Smirnov and Shapiro – Wilk test values (p>.05) indicate that the distribution is normal (Büyüköztürk, et al., 2010; Kalaycı, 2010; Korucuk, Aslan- Cetin, 2019).

A Levene test was completed to determine the homogeneity of variance of distribution which resulted in p>.05. A Levene test value of p>.05 indicates homogeneity of variance (Büyüköztürk, 2018; Can, 2014; Pallant, 2017). In the light of these results, since the data met the parametric test assumptions, parametric tests of frequency analysis, one-way analysis of variance (ANOVA) and independent sample t-test were used to answer the research questions.

Table 4.; Cronbach Alpha Internal Consistency Coefficients for ASTUSNEP

Dimensions	*Cronbach Alpha Value*
Behavior Dimension (1st Dimension - 9 Items)	.84
Information Dimension (2nd Dimension – 7 Items)	.83
Emotion Dimension (3rd Dimension – 5 Items)	.81
Total	.90

Table 5: Split-Half Test Results for ASTUSNEP

ASTUSNEP Halves	*Cronbach Alpha*
1st Half	.84
2nd Half	.83

Findings

In this section, the findings in relation to the research questions are presented. In presenting the findings, research questions are addressed and explained sequentially.

Findings on the First Research Question

The first research question of the study was "*1. What is the level of attitudes of vocational school students towards using social networks for educational purposes?*" In order to answer this question, responses provided in the ASTUSNEP scale were examined, the mean and standard deviation values of the sub-dimensions and the whole scale are presented with explanation in Table 7.

In Table 7, the mean values of the sub-dimensions of ASTUSNEP are in the high "positive" range for the behavior sub-dimension ($\overline{X}$ =3.77, sd=.69), very high "very positive" range for the knowledge sub-dimension ($\overline{X}$ =4.22, sd=.66), and "moderate" range for the emotion sub-dimension ($\overline{X}$ =3.37, sd=.69). The value of the whole scale is in the range of high "very positive" ($\overline{X}$ =3.80, ss = .60).

Table 6.: Kolmogorov-Smirnov, Shapiro-Wilk and Levene Test Values of ASTUSNEP

	Kolmogorov - Smirnov			*Shapiro - Wilk*		
Dimensions	*Statistics*	*Sd*	*p*	*Statistics*	*Sd*	*p*
Emotion Dimension	.110	351	.052	.861	351	.051
Information Dimension	.065	351	.073	.875	351	.069
Emotion Dimension	.072	351	.062	.788	351	.068
Levene Test Value	df1=4	df2=346	Sig=.809			

Findings on the Second and Third Research Question

The second research question was "*2. Is there a significant difference between the attitudes of vocational school students towards the use of social networks for educational purposes and their gender?*" and the third research question was "*3. Is there a significant difference between vocational school students' attitudes towards using social networks for educational purposes and types of education?*" An independent sample t-test was completed to answer the research questions and to determine the difference between the variables. The test results are presented in Table 8.

When Table 8 is examined, it is seen that there are statistically significant differences between the genders of the students and all sub-dimensions of ASTUSNEP. Accordingly, a statistically significant difference was found between the mean of female students ($\overline{X}$ =3.86, sd=.68) and the mean of male students ($\overline{X}$ =3.60, sd=.69) ($t_{(349)}$ =3.389, p<.05) in favor of the female students in the behavior sub-dimension. In the knowledge sub-dimension, a statistically significant difference was found between the mean of female students ($\overline{X}$ =4.17, sd=.65) and the mean of male students ($\overline{X}$ =3.98, sd=.67) in favor of female students ($t_{(349)}$=2.558, p<. 05). A statistically significant difference was found between the gender variable and the emotion sub-dimension between the means of female students ($\overline{X}$ =3.68, sd=.72) and the male students ($\overline{X}$ =3.38, sd=.73) in favor of female students ($t_{(349)}$= 3.757, p<.05).

Another finding presented in Table 8 is a statistically significant difference between the education types of the students and the emotion sub-dimension of ASTUSNEP. In the emotion sub-dimension, it was determined that there was a statistically significant difference between the means of daytime education students ($\overline{X}$ =3.51, sd=.73) and evening education students ($\overline{X}$ =3.70, sd=.74) in favor of the evening education students ($t_{(349)}$=2.091, p<.05). However, no statistically significant difference was found between the behavior sub-dimension ($t_{(349)}$=-1.087, p>.05) and the knowledge sub-dimension ($t_{(349)}$=-.297, p>.05) and the education type variable.

Findings on the Fourth Research Question

The fourth research question was "*4. Is there a significant difference between the attitude levels of vocational school*

Table 7: Means and Distributions of ASTUSNEP

Sub-Dimensions	*n*	$\overline{X}$	*sd*	*Value*
Behavior Dimension	351	3.77	.69	Positive (High)
Information Dimension	351	4.22	.66	Very Positive (Very High)
Emotion Dimension	351	3.37	.69	Moderate
TOTAL	351	3.80	.60	Positive (High)

Table 8: Independent Sample t-Test Results for Comparing the Students' Gender and Education Types with Their Attitudes Towards the Use of Social Networks for Educational Purposes

	Sub-Dimensions	Variable	n	$\overline{X}$	ss.	sd.	t	p
Gender	Behavior Dimension	Female	220	3.86	.68	349	3.389	.001*
		Male	131	3.60	.69			
	Information Dimension	Female	220	4.17	.65	349	2.558	.011*
		Male	131	3.98	.67			
	Emotion Dimension	Female	220	3.68	.72	349	3.757	.000*
		Male	131	3.38	.73			
Type of Education	Behavior Dimension	Daytime Ed.	252	3.74	.66	349	-1.087	.278
		Evening Ed.	99	3.83	.75			
	Information Dimension	Daytime Ed.	252	4.10	.68	349	-.297	.766
		Evening Ed	99	4.11	.61			
	Emotion Dimension	Daytime Ed.	252	3.51	.73	349	-2.091	.037*
		Evening Ed	99	3.70	.74			

*Significant at the p<0.05 level

students towards the use of social networks for educational purposes and their departments?" In analyzing the data, a one-way analysis of variance was completed, and the results are presented in Table 9.

According to Table 9, a statistically significant difference was found between the departments of the students and the knowledge sub-dimension of ASTUSNEP [$F_{(4-346)}$=4.777, p<.05]. According to the results of the Scheffe test to identify the difference, a statistically significant difference was found between the means of the students in the child development department ($\overline{X}$ =4.23, sd =.60) and the students in the private security and protection department ($\overline{X}$ =3.78, sd = .77) in favor of the students of the child development department. In addition to this result, a statistically significant difference was found between the departments of the students and the emotion sub-dimension of ASTUSNEP [$F_{(4-346)}$=4.236, p<.05]. According to the results of the Scheffe test to identify the difference, there is a statistically significant difference between the means of the students in the child development department ($\overline{X}$ =3.68, sd = .72) and the in the private security and protection department ($\overline{X}$ =3.21, sd = .70) in favor of the students in the child development department. However, no statistically significant difference was found between the departments of the students and the behavior sub-dimension averages of ASTUSNEP [$F_{(4-346)}$=2.257, p>.05].

Findings on the Fifth Research Question

The fifth research question was "*5. Is there a significant difference between the attitude levels of vocational school students towards the use of social networks for educational purposes and their grade point averages?"* A one-way analysis of variance was completed in analyzing the data and the results are presented in Table 10.

Table 10 shows that there are statistically significant differences between students' grade point averages (GPA) and all sub-dimensions of ASTUSNEP. A statistically significant difference was found between the GPAs of the students and the behavior sub-dimension [$F_{(4-346)}$=7.484, p<.05]. A Scheffe test was completed to identify the differences within the groups. Statistically significant differences were found between the students with a GPA of 3.51-4.00 ($\overline{X}$ =4.05, sd=.44) and a GPA of 2.00 or below ($\overline{X}$ =3.61, sd=.84), between the students with a GPA of 2.01-2.50 ($\overline{X}$=3.43, sd=.95), a GPA of 2.51-3.00 ($\overline{X}$=3.64, sd=.73) and a GPA of 3.01-3.50 ($\overline{X}$=3.61, sd=.84) in favor of students with an average of 3.51-4.00.

A statistically significant difference was found between the GPAs of the students and the knowledge sub-dimension

Table 9: One-Way Analysis of Variance Results for Comparing Students' Levels of Attitudes Towards Their Departments and Their Use of Social Networks for Educational Purposes

Sub-Dimensions	*Variable*	*n*	$\overline{X}$	*ss.*	*sd.*		*Mean Square.*	*F*	*p*	*Difference*
Behavior Dimension	Child Dev. (1)	173	3.86	.68	Within Group	346	.468	2.257	.063	---
	Pri. Sec. and Pro. (2)	44	3.54	.64						
	Culinary Arts (3)	39	3.70	.71	Between Groups	4	1.057			
	Occ. He. and Saf. (4)	48	3.73	.71						
	Logistics (5)	47	3.70	.67						
Information Dimension	Child Dev. (1)	173	4.23	.60	Within Group	346	.417	4.777	.001*	1>2
	Pri. Sec. and Pro. (2)	44	3.78	.77						
	Culinary Arts (3)	39	4.07	.58	Between Groups	4	1.994			
	Occ. He. and Saf. (4)	48	4.05	.59						
	Logistics (5)	47	3.99	.77						
Emotion Dimension	Child Dev. (1)	173	3.68	.72	Within Group	346	.521	4.236	.002*	1>2
	Pri. Sec. and Pro. (2)	44	3.21	.70						
	Culinary Arts (3)	39	3.55	.76	Between Groups	4	2.208			
	Occ. He. and Saf. (4)	48	3.43	.77						
	Logistics (5)	47	3.63	.68						

**Significant at the p<0.05 level.*

Table 10: One-Way Analysis of Variance Results for the Comparison of Students' Grade Point Averages and Attitudes Towards Their Use of Social Networks for Educational Purposes

Sub-Dimensions	*Variable*	*n*	$\overline{X}$	*ss.*	*sd.*		*Mean Square*	*F*	*p*	*Difference*
Emotion Dimension	2.00 and below (1)	36	3.61	.84	Within Group	346	.442	7.484	.000*	5>1, 5>2, 5>3, 5>4
	2.01 – 2.50 (2)	30	3.43	.95						
	2.51 – 3.00 (3)	86	3.64	.73	Between Group	4	3.,311			
	3.01 – 3.50 (4)	103	3.75	.60						
	3.51 – 4.00 (5)	96	4.05	.44						
Information Dimension	2.00 and below (1)	36	4.12	.86	Within Group	346	.398	9.149	.000*	5>1, 5>2, 5>3, 5>4
	2.01 – 2.50 (2)	30	3.90	.70						
	2.51 – 3.00 (3)	86	4.07	.60	Between Group	4	3.644			
	3.01 – 3.50 (4)	103	3.88	.69						
	3.51 – 4.00 (5)	96	4.40	.44						
Emotion Dimension	2.00 and below (1)	36	3.48	.86	Within Group	346	.514	5.440	.000*	5>1, 5>2, 5>3, 5>4
	2.01 – 2.50 (2)	30	3.31	.78						
	2.51 – 3.00 (3)	86	3.47	.76	Between Group	4	2.798			
	3.01 – 3.50 (4)	103	3.49	.73						
	3.51 – 4.00 (5)	96	3.85	.58						

**Significant at the p<0.05 level.*

[$F_{(4-346)}$=9.149, p<.05]. According to the results of the Scheffe test completed to detect the difference, statistically significant differences were found between the students with a GPA of 3.51-4.00 ($\overline{X}$ =4.40, sd=.44) and a GPA of 2.00 and below ($\overline{X}$ =4.12, sd=.86), between a GPA of 2.01-2.50 ($\overline{X}$ =3.90, sd=.70), a GPA of 2.51- 3.00 ($\overline{X}$ =4.07, sd=.60) and a GPA of 3.01-3.50 ($\overline{X}$ =3.88, sd=.69) in favor of the students with a GPA of 3.51-4.00.

Similarly, a statistically significant difference was found between the grade point averages of the students and the emotion sub-dimension [$F_{(4-346)}$=5.440, p<.05]. According to the results of the Scheffe test completed to identify the differences, statistically significant differences were found between students with a grade point average of 3.51-4.00 ($\overline{X}$ =3.85, sd=.58) and a GPA of 2.00 or below ($\overline{X}$ =3.48, sd=.86), and between the students with a GPA of 2.01-2.50 ($\overline{X}$ =3.31, sd=.78), 2.51- 3.00 ($\overline{X}$ =3.47, sd=.76) and 3.01-3.50 ($\overline{X}$ =3.49, sd=.73) in favor of the students with a GPA of 3.51-4.00.

Findings on the Sixth and Seventh Research Questions

The sixth research question was "*6. Is there a significant difference between the attitude levels of vocational school students towards using social networks for educational purposes and the type of social network they use most?*" and the seventh research question was "*7. Is there a significant difference between the attitude levels of vocational school students towards using social networks for educational purposes and the time they allocate to social networks during the day?*" In answering the research questions, a one-way analysis of variance was completed to identify the differences between the variables and the test results are presented in Table 11.

As shown in Table 11, statistically significant differences were found between the social networks that students use the most and the emotion sub-dimension of ASTUSNEP [$F_{(3-347)}$=4.142, p<.05]. A Scheffe test was completed to identify the differences within the groups and a statistically significant difference was found between the means of the students who use Instagram the most ($\overline{X}$ =3.39, sd=.77) and the means of the students who use YouTube the most ($\overline{X}$ =3.70, ss=.75) in favor of the students who use Youtube the most. Similarly, a statistically significant difference was found between the means of the students who use Instagram the most ($\overline{X}$ =3.39, sd=.77) and the means of the students who use WhatsApp the most ($\overline{X}$ =3.66, ss=.65) is in favor of the students who use WhatsApp the most.

However, there was no statistically significant difference between the social network most used by the students and the sub-dimensions of behavior [$F_{(3-347)}$=2.248, p>.05] and information [$F_{(3-347)}$=.864, p>.05] of ASTUSNEP. Similarly, there was no statistically significant difference between the means of the time spent by students on social networks and ASTUSNEP's sub-dimensions of behavior [$F_{(3-347)}$, p>.05],

Table 11: One-Way Analysis of Variance Results for the Comparison of the Type of Social Networks Mostly Used by Students and the Time They Allocate to Social Networks During the Day and The Attitude Levels of Their Use of Social Networks for Educational Purposes

	Sub-Dimension	Variable	n	$\overline{X}$	ss.	sd.		Mean Square	F	p	Dif.
Social Network Most Used	Behavior Dimension	YouTube (1)	74	3.87	.59	Within Group	347	.470	2.248	.083	---
		Facebook (2)	44	3.65	.80						
		Instagram (3)	127	3.67	.77	Between Groups	3	1.057			
		WhatsApp (4)	106	3.85	.58						
	Information Dimension	YouTube (1)	74	4.15	.56	Within Group	347	.436	.864	.460	---
		Facebook (2)	44	4.12	.65						
		Instagram (3)	127	4.02	.76	Between Groups	3	,377			
		WhatsApp (4)	106	4.14	.61						
	Emotion Dimension	Youtube (1)	74	3.70	.75	Within Group	347	.526	4.142	.007*	1>3, 4>3
		Facebook (2)	44	3.43	.73						
		Instagram (3)	127	3.39	.77	Between Groups	3	2.180			
		WhatsApp (4)	106	3.66	.65						
Time Spent on Social Networks	Behavior Dimension	Less than 1h (1)	40	3.78	.68	Within Group	347	.478	.240	.868	---
		1-2 hours (2)	34	3.78	.56						
		2-3 hours (3)	90	3.81	.64	Between Groups	3	.115			
		More than 3h (4)	187	3.74	.73						
	Information Dimension	Less than 1h (1)	40	4.10	.69	Within Group	347	.435	1.029	.380	---
		1-2 hours (2)	34	3.92	.67						
		2-3 hours (3)	90	4.08	.62	Between Groups	3	.448			
		More than 3h (4)	187	4.14	.67						
	Emotion Dimension	Less than 1h (1)	40	3.69	.76	Within Group	347	.539	1.417	.238	---
		1-2 hours (2)	34	3.36	.68						
		2-3 hours (3)	90	3.61	.67	Between Groups	3	.763			
		More than 3h (4)	187	3.56	.77						

**Significant at the p<0.05 level.*

information [$F_{(3-347)}$=1.029, p>.05] and emotion [$F_{(3-347)}$=1.417, p>.05].

Discussion, Conclusion and Recommendations

The technological advances experienced in the current century are felt in the field of education, and therefore, the learning environment goes beyond the classroom. Particularly, developments in digital technologies (computer, smart phone, tablet, internet, social networks, etc.) allow students to easily access and construct knowledge outside of school. It is seen that individuals frequently use social networks to communicate and meet their social needs starting from a young age. In the studies conducted, the age of using social networks the most in Turkey is the age that corresponds to higher education (18-24/25-34) with 60%. Similar studies show that the first four social networks that are used the most in Turkey are YouTube, Instagram, WhatsApp, and Facebook. In addition, it is known that the use of social networks for educational purposes contributes to in-school and outside of school learning of students. Especially after the COVID-19 pandemic, with the increasing importance of distance education, it has been seen that the purposeful use of social networks for education has gained importance. Considering that the possibility of using social networks for educational purposes may have increased in the COVID-19 pandemic, the importance of this study can be better understood. Therefore, first, students should have a positive attitude towards using social networks for educational purposes as a positive attitude towards any concept is one of the main factors affecting the repetition of that behavior. Accordingly, the aim of this study was to examine students' attitudes towards using social networks for educational purposes, and to evaluate these attitudes in terms of various variables (gender, type of education, department, grade point average, time spent on social networks, and the most used social networks).

The first research question was "What is the level of attitudes of vocational school students towards using social networks for educational purposes?" The analyses showed that the attitudes of the students towards the use of social networks for educational purposes were in the high level "positive" value range. When the means of the sub-dimensions of ASTUSNEP were evaluated, the behavior sub-dimension was in the high "positive" value range, the knowledge sub-dimension was in the very high "very positive" range, and the emotion sub-dimension was in the "moderate" value range. These findings revealed that students' attitudes towards the use of social networks for educational purposes were the highest in the dimension of knowledge and the lowest in the dimension of emotion. In other words, while students have a moderate level of feeling of using social networks for educational purposes, it is seen that the level of knowledge on this subject is very high. Thus, it was observed that the conversion level of these attitudes into behavior is high (although not as high as their knowledge level). Similar findings were obtained in the studies conducted by Çiftçi in 2018, by Kesici in 2018 and by Kahyaoğlu & Çelik in 2011 which reported that students' attitudes towards using social networks for educational purposes were "high-level-positive".

The second research question was "Is there a significant difference between the attitudes of vocational school students towards the use of social networks for educational purposes and their gender?" and an independent sample t-test was completed in analyzing the data to answer the question. Analysis results showed that there were statistically significant differences between the genders of the students and all sub-dimensions of ASTUSNEP. Accordingly, in all sub-dimensions (behavior, information, and emotion sub-dimension), there were statistically significant differences in female students between the means of female and male students. In line with these data, it can be concluded that the attitude levels of female students towards the use of social networks for educational purposes are higher than the male students. Similar results were obtained by Aslanyürek, Gürdal, Dursun, Tunçel & İzmirli-Ayan (2015), Diker & Uçar, (2016), Koç & Tatlı, (2017) and Ök (2013) which showed that there was a difference in female students between the students' gender and use of social networks for educational purposes. However, in studies conducted by Acar & Yenmiş (2014), Bedir (2016), Kahyaoğlu & Çelik (2011) and Argın (2013), no difference was found between students' gender and their attitudes towards using social networks for educational purposes.

The third research question was "Is there a significant difference between the attitude levels of vocational school students towards the use of social networks for educational purposes and the types of education?" An independent sample t-test was completed to answer the question and a statistically significant difference was found between the education types of the students and the emotion sub-dimension of ASTUSNEP. In the emotion sub-dimension, it was determined that there was a statistically significant difference in evening education students between the means of the daytime education students and the evening education students. However, no statistically significant difference was found between the behavior sub-dimension and knowledge sub-dimension and the education type variable. It was determined that the levels of knowledge and behavior towards the use of social networks for educational purposes by both types of education do not differ significantly. However, it is seen that the emotional attitude levels of evening education students towards using social networks for educational purposes are higher than those of daytime education students. The reason for this situation can be shown in the study titled "Examination of Multiple Intelligence Fields of Vocational School Students" by Taşgın & Korucuk (2019), based on the Multiple Intelligence Theory of evening education students, that social intelligence types were determined to be significantly different from other intelligence types.

The fourth research question was "Is there a significant difference between the attitude levels of vocational school students towards the use of social networks for educational purposes and their departments?" The analyses resulted in a statistically significant difference between the departments of the students and the knowledge sub-dimension of ASTUSNEP. A statistically significant difference was found in students in the child development department between the means of the students in the child development department and the students in the private security and protection department. In addition to this result, a statistically significant difference was found between the departments of the students and the emotion sub-dimension of ASTUSNEP. There is a statistically significant difference between the means of the students in the child development department and the students in the private security and protection department, in favor of the students in the child development department. However, no statistically significant difference was found between the means of the departments and the behavior sub-dimension of ASTUSNEP. The mean of the students in the child development department for using social networks for educational purposes is higher than all other departments, but it differs significantly from the students in the private security and protection department only in the sub-dimensions of knowledge and emotion. The reason for this is that the child development department mostly consists of female students and the results of the analyses completed within the scope of the second research question, the attitude levels of female students towards using social networks for educational purposes differ significantly from male students in all sub-dimensions in favor of female students. Similar results were obtained by Bedir (2016), İliş (2018), Teke (2015) where they found differences between the students' departments and their level of attitude towards using social networks for educational purposes.

The fifth research question was "Is there a significant difference between the attitude levels of vocational school students towards the use of social networks for educational purposes and their grade point averages?" A one-way analysis of variance was completed, and statistically significant differences were found between the student GPAs and all sub-dimensions of ASTUSNEP in favor of the students with a GPA of 3.51-4.00. The attitudes of students with a GPA of 3.51-4.00 towards using social networks for educational purposes are significantly different from other students. The students with the highest GPA of 3.51-4.00 have significantly higher knowledge, emotion, and behavior-oriented attitudes towards using social networks for educational purposes than the students within other GPA ranges. In other words, it can be concluded that students with high GPAs approach social networks more positively and can use social networks more effectively for educational purposes. When the relevant literature was evaluated, it was understood that different results were obtained than those obtained in this study. In the study conducted by Tezer, Taşpolat, Kaya and Sapanca in 2017, it was determined that the use of social media did not differ according to the GPA. In addition, in a study conducted by Bijari, Javadinia, Erfanian, Abedini, and Abassi in 2013, it was determined that there was a negative relationship between students' level of using social networks and their GPA.

The sixth research question was "Is there a significant difference between the attitude levels of vocational school students towards using social networks for educational purposes and the type of social network they use the most?" The analyses showed statistically significant differences d between the social network that students use the most and the emotion sub-dimension of ASTUSNEP. A statistically significant difference was found in students who use Instagram the most between the mean scores of the students who use Instagram the most, and the mean scores of the students who use YouTube and WhatsApp the most. In other words, the emotional attitude levels of the students who use YouTube and WhatsApp the most for educational purposes differ positively and significantly from the emotional attitude levels of the students use Instagram. It can be concluded that the educational use of YouTube and WhatsApp is more preferred than Instagram. Similar results were found in a study by Kesici (2018) in which a positive differentiation was found in the attitudes of students who use YouTube the most. On the other hand, according to the mean scores of preferences, social networks used by students for educational purposes are Instagram, WhatsApp, YouTube, and Facebook, respectively. However, the social network not preferred by students for educational purposes was Twitter. Another result of Kesici's (2018) study is that the most used social networks for educational purposes are Instagram, WhatsApp, YouTube, and Facebook, respectively. Kesici also revealed that Twitter is not used by students for educational purposes, in line with the results of this study. However, contrary to these study findings, in the study conducted by We are social & Hootsuit (2019), the most preferred social networks are listed as YouTube, Instagram, WhatsApp, Facebook, Twitter, respectively. YouTube, ranked in the third place in this study, ranked in the first place in the study conducted by We are social & Hootsuit (2019). In the study conducted by Bedir (2016), the most preferred social networks for educational purposes were determined as Facebook, YouTube, Instagram, and Twitter. Wattenhofer, Wattenhofer & Zhu (2012) stated in their study that YouTube is the most preferred social network. Although different results are obtained in different samples, it is seen that YouTube, Instagram, and Facebook are among the most used networks in the studies examined. Thus, learning environments can be enriched by particularly using these three social networks frequently in classroom and out-of-class activities in educational environments. In support of the findings of this study, Bedir (2016), Sarsar, Başbay & Başbay (2015) and Sarsar & Harmon (2012) also found differences between the types of social network students use the most and their attitudes towards using social networks for educational purposes.

The seventh research question was "Is there a significant difference between the attitude levels of vocational school students towards using social networks for educational purposes and the time they allocate to social networks during the day?" The results of the one-way analysis of variance showed no statistically significant difference between the time students spend on social networks and the mean scores of all sub-dimensions of ASTUSNEP. In other words, it was concluded that there was no difference between the daily use of social networks by students and the level of students' attitudes towards using social networks for educational purposes. Baytemir (2006) also obtained similar findings and no difference was found between the daily use of social networks by students and the level of students' attitudes towards using social networks for educational purposes. However, on the contrary, Atalay (2014) and İliş (2018) determined that the duration of students' use of social networks and the level of students' attitudes towards using social networks for educational purposes differed positively.

In line with the findings of this study, several recommendations are offered:

1. Considering that the level of emotional attitudes in the use of social networks for educational purposes is moderate, implementing activities that can support students' motivation and emotional states to use social networks for educational purposes is recommended.
2. Considering that male students' attitudes towards using social networks for educational purposes are lower than female students, it is recommended that studies be conducted to support male students' attitudes towards using social networks for educational purposes.

3. Considering that the emotional attitude levels of the daytime education students towards the use of social networks for educational purposes are lower than the evening education students, it is recommended to carry out activities to support the motivation and emotional states of daytime education students to use social networks for educational purposes.
4. Considering that the attitudes of students enrolled in the private security and protection department towards using social networks for educational purposes are lower than other departments, it is recommended to carry out activities to support the attitudes of all students, especially the students of the private security and protection department, towards using social networks for educational purposes.
5. Considering that the students with a grade point average of 3.51-4.00 have a higher level of attitude towards using social networks for educational purposes compared to other students, it is recommended to conduct studies and implement practices that can positively affect the attitudes of students with a GPA of 3.01-3.50 and below towards using social networks for educational purposes.
6. Given that the emotional attitude levels of the students, who use Instagram the most, towards the use of social networks for educational purposes are lower than the students who use YouTube and WhatsApp the most, it is recommended to carry out activities to increase the motivation and emotional states of students, who use Instagram the most, to use social networks for educational purposes.
7. Implementing encouraging activities for students to plan the time they spend on social networks during the day and to increase the time spent on the use of social networks for educational purposes is recommended.
8. Channels and forums related to the courses can be established to create and continue the discussion environment and achieve relevant outcomes.
9. It can be recommended to organize in-class activities (information meetings, motivational activities, seminars, making use of social media tools in some of the lessons, etc.) to increase the level of students' attitudes towards using social networks for educational purposes.
10. Activities can be organized to improve students' awareness on and to encourage students to use social networks for educational purposes.
11. Instructors can be informed about using social networks more effectively for educational purposes, and accordingly, providing in-service training on this subject to develop competencies is recommended.
12. This study is limited to vocational school students enrolled at a state university in the Eastern Anatolia Region during the 2021-2022 academic year. Therefore, further research at different educational levels, at different times and in different universes/samples is recommended.
13. Studies using qualitative and mixed-methods approaches are recommended for detailed examinations.

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