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### **Opiniones de los profesores antes del servicio sobre el uso de los sitios de redes sociales**

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**Abstract:** The general purpose of the study is to determine pre-service teachers' views on the use of social networking sites. In line with the general purpose, answers to the research questions were sought. The answers to the following questions have been sought for to reach the general purpose. 1. Is there a significant difference in the intentions of pre-service teachers to use online social networks in their future professions between their departments? 2. Is there a significant difference in the effort expectancy of pre-service teachers for online social networks between their departments? The study was carried out in the spring term of 2016-2017. The study is conducted with a quantitative methodology and designed to determine pre-service teachers' intentions and effort expectancy on the use of online social networking sites for instructional purposes. In the study, Demir & Akbulut (2017) developed 5-point Likert type pre-service teachers' scale was used. A total of 108 volunteer pre-service teachers studying at the Faculty of Education participated in the study. The study was conducted during the spring term of 2016-2017. All students of the faculty of education participated in the study. The result of the study reveals that pre-service teachers' views on the use of social networking sites were high. It is also important to provide pre-service teachers with seminars on the use of technological platforms and smart devices; teachers should be supported by means of technology regarding the situations that may assist them in their daily lives and their education.

**Resumen:** El propósito general del estudio es determinar las opiniones de los profesores antes del servicio sobre el uso de los sitios de redes sociales. En línea con el propósito general, se buscaron respuestas a las preguntas de investigación. Se han buscado las respuestas a las siguientes preguntas para alcanzar el propósito general. 1. ¿Hay una diferencia significativa en las intenciones de los maestros de pre-servicio para usar las redes sociales en línea en sus futuras profesiones entre sus departamentos? 2. ¿Existe una diferencia significativa en la expectativa de esfuerzo de los maestros de servicios previos para las redes sociales en línea entre sus departamentos? El estudio se llevó a cabo en el semestre de primavera 2016-2017. El estudio se lleva a cabo con una metodología cuantitativa y está diseñado para determinar las intenciones de los profesores antes del servicio y la expectativa de esfuerzo en el uso de los sitios de redes sociales en línea con fines educativos. En el estudio, Demir y Akbulut (2017) desarrollaron una escala de maestros de pre-servicio de 5 puntos tipo Likert. Un total de 108 profesores voluntarios de pre-servicio que estudian en la Facultad de Educación participaron en el estudio. El estudio se realizó durante el semestre de primavera de 2016-2017. Todos los alumnos de la facultad de educación participaron en el estudio. El resultado del estudio revela que las opiniones de los profesores antes del servicio sobre el uso de los sitios de redes sociales fueron altas. También es importante proporcionar a los profesores antes del servicio seminarios sobre el uso de plataformas tecnológicas y dispositivos inteligentes; Los maestros deben ser apoyados por medio de la tecnología en relación con las situaciones que pueden ayudarlos en su vida diaria y su educación.

**Keywords:** Technology; Technology Acceptance; Pre-service Teachers; Technology Assisted Instruction; Social Networking Sites; Online Social Network

**Palabras clave:** Tecnología; Aceptación de Tecnología; Maestros de Preservicio; Tecnología de Instrucción Asistida; Sitios de redes sociales; Red social online

## 1. Introduction

Today, with the development of technology, information and communication technologies, online social networking sites are widely used (Özmen, Aküzüm, Sünkür & Baysal, 2011; Traxler, Barcena & Laborda, 2015; Ippakayala, El-Ocla, 2017). Along with the use of technology in daily life, the use of technologies that are preferred as models for instructional purposes by pre-service teachers increase every day (Garton, Haythornthwaite, & Wellman 1997; Magal Royo & García Laborda, 2017; García Laborda & Litzler, 2017). The benefits of social networking sites for pre-service teachers facilitate the process of transition from the era of information to the era of using information in education (Caliskan & Ozcan, 2017; Bicen & Uzunboylu, 2013; Tess, 2013). While internet applications are constantly updated online social networking sites sustain their most efficient period.

Within this context, pre-service teachers communicate with their friends, view photos and posts, have a good time sending and receiving messages and access any desired information anytime (Greenhow & Askari, 2017; Abdugulova, 2017). Yavanoğlu & Sağıroğlu in their 2010 study define social networking sites as "*means by which individuals use to communicate with people they can easily have rapport with at the same cultural level through internet communication methods and also means by which people can make social contacts in man-made virtual platforms through presenting symbolic actions that symbolize various gestures in normal social life*".

The use of social networking sites for instructional purposes and the transition process for technology in education, information communication and technology networks have brought different dimensions to the perspectives of pre-service teachers with regards to information (Solmaz, Tekin, Herzem & Demir, 2013; Aslan, 2016; Tur, Carpenter & Marin, 2017). Pre-service teachers who use networking sites for learning purposes have begun to place emphasis on social environments that are based on collaborative social environments in which they can have group work and use their opinions and skills (Salih & Hamarat, 2016; Baglama, Yikmis & Demirok, 2017). While technology provides these possibilities, Web 2.0 tools lead the pre-service teachers to carry socializing platforms and learn through updated communication technologies that can cater for their needs to the universe of internet (Uzunboylu, Hursen, Ozuturk & Demirok, 2015; Ozcan & Bicen, 2016; Lee, Baring, Maria & Reysen, 2017).

Social networking sites are one of the platforms that emerged through the widespread use and advance of Web 2.0 technologies (Şen, 206). Web 2.0 tools that provide pre-service teachers with an efficient dimension to the education process with their easy-to-use structure, instructional interface and product range suitable for needs also calls for support for pre-service teachers to prepare materials themselves through combining information with technology and to implement them in education process (Atıcı & Yıldırım, 2010; Tugun, Uzunboylu & Ozdamli, 2017).

In addition to these, social networks that are among the most effective dimensions of use for instructional purposes have great significance today and have become one of the indispensable resources of teachers in the education environment (Kaya & Yılayaz, 2013; Tezer & Ozcan, 2015; Tong & Bakan, 2016; Uzunboylu, Bicen & Vehapi, 2017). It is important that such topics are present in the literature so as to allow pre-service teachers who are described as future leaders and teachers to become more equipped, more open to learning and able to follow up innovations at all times.

### 1.1. Relevant studies

In their study Özmen, Aküzüm, Sünkür & Baysal (2011) investigated the functionality of social networking sites in educational environments and pointed out to the necessity of extensive research for more effective use of social networking sites in the educational field through conducting necessary infrastructure works and encouraging teachers at every stage of education.

In their study Ada, Çiçek, Gamze & Kaynakyşil (2013) aimed to determine and analyze if the motivating factors to use online social networking sites differ with regards to demographic features. The results of the study reveal that motivating factors such as searching for information and connectivity differ by sex while factors such as searching for information, problem solving, content management and connectivity differ by the class levels of students. Other findings reveal that senior students of Business Department are more motivated to use social networking sites for the factors as searching for information, problem solving, content management and connectivity than university freshmen.

In his study, Genç (2010) presents evaluations regarding the use of Web 2.0 technologies that are among the innovations of Web 2.0 technology in the field of education. For the application in the study; 3 undergraduate courses and 1 postgraduate course were selected. The results of the study reveal that the students have very positive thoughts about the application and have adopted Facebook as a learning tool as well as a social communication tool.

In their study Ekici & Kıyıcı (2012) investigated the effects of social networks on learning through developing an application in Facebook social networking site. A total of 102 university students participated in the study. The students participated in the study are divided into two groups as experiment and control group. Achievement tests prepared by the researchers were employed. At the end of a 4-week application, the results revealed that the students in the experiment group are more successful academically than the students in the control group who received conventional instruction.

## 1.2. Purpose of the study

The purpose of this study is to determine pre-service teachers' intentions and effort expectancy on the use of online social networking sites for instructional purposes. The answers to the following questions have been sought for to reach the general purpose.

1. Is there a significant difference in the intentions of pre-service teachers to use online social networks in their future professions between their departments?
2. Is there a significant difference in the effort expectancy of pre-service teachers for online social networks between their departments?

## 2. Methods

This research is a single group and it is a quantitative study. While selecting the study group, simple sample selection was applied. All teacher candidates studying at a private university participated in the study. The study was applied to 108 pre-service teachers in 2016-2017 term.

### 2.1. Instruments

“*Online social networks for I-learning acceptance and use*” scale: in order to get feedback from prospective teachers on determining the educational acceptance and use of online social networks of teacher candidates, a previously developed 5-scale Likert scale (Iron & Akbulut, 2017) was used. There are 4 dimensions on the scale developed by the authors. These are the use of online social networks for teaching purposes (10 articles), social impact (11 articles), intention to use (7 articles) and expectation of effort (8 articles). In the study, two dimensions from the relevant scale were used for the purpose. The dimensions used are the intention to use and the expectation of effort. The cronbach alpha value, which is the coefficient of validity reliability for the scale used is  $\alpha = .93$  is calculated by the authors who developed it. In the study, cronbach alpha value, which is the validity coefficient of the scale, is  $\alpha = .96$ .

## 2.2. Participants

A total of 108 volunteer pre-service teachers studying at the Faculty of Education participated in the study. The study was conducted during the spring term of 2016-2017. All students of the faculty of education participated in the study. All teacher candidates who were enrolled in the study were selected by simple random sampling method and all teacher candidates who were enrolled in a private university were included in the study. The distribution of pre-service teachers by their departments is presented in Table 1.

**Table 1.**

The distribution of pre-service teachers by their departments

Department	<i>f</i>	%
Psychological Counseling and Guidance	43	36.1
Special Education	29	24.4
Classroom Teaching	19	16.0
Computer Education and Educational Technologies	17	14.3
<b>Total</b>	<b>108</b>	<b>100.0</b>

As seen in Table 1, among the pre-service teachers in the study group; 36.1% (43 people) study at the department of Psychological Counseling and Guidance, 24.4% (29 people) study at the department of Special Education, 16.0% (19 people) study at the department of Classroom Teaching and 14.3% (17 people) study at the department of Computer Education and Educational Technologies. The distribution of pre-service teachers by sex is presented in Table 2.

**Table 2.**

The distribution of pre-service teachers by their sex

Sex	<i>f</i>	%
Male	53	44.5
Female	55	46.2
<b>Total</b>	<b>108</b>	<b>100.0</b>

As seen in Table 2, the study group consists of 44.5% (53 people) male pre-service teachers and 46.2% (55 people) female pre-service teachers. The findings in the sex group reflect the real distribution of sexes. The distribution of pre-service teachers by age is presented in Table 3.

**Table 3.**

The distribution of pre-service teachers by their age

Age	<i>f</i>	%
18-25	108	100
<b>Total</b>	<b>108</b>	<b>100.0</b>

As seen in Table 3, 100% (108 people) of the pre-service teachers in the study group are between the age group of 18 and 25. The findings in the age group reflect the real distribution of age. The distribution of pre-service teachers by their daily use of internet is presented in Table 4.

**Table 4.**

The distribution of pre-service teachers by their daily use of internet

Daily Use of Internet	<i>f</i>	%
2-4	15	12.6
4-6	49	41.2
6-8	30	27.8
8 and More	14	11.8
<b>Total</b>	<b>108</b>	<b>100.0</b>

As seen in Table 4, among the pre-service teachers who participated in the study 12.6% (15 people) use the internet for 2-4 hours, 41.2% (49 people) use the internet for 4-6 hours, 27.8% (30 people) use the internet for 6-8 hours and 11.8% (14 people) use the internet for 8 hours and more daily. The distribution of pre-service teachers by their use of technological devices is presented in Table 5.

**Table 5.**

The distribution of pre-service teachers by their use of technological devices

Use of Technological Devices	<i>f</i>	%
Smart Phone	51	45.0
Portable Computer	49	47.0
All	8	8.0
<b>Total</b>	<b>108</b>	<b>100.0</b>

As seen in Table 5, among the pre-service teachers who participated in the study 45.0% (51 people) use smart phones, 47.0% (49 people) use portable computers and 8.0% (8 people) use all of the technological devices.

"Do you enjoy using technological devices?": The distribution of pre-service teachers by their answers to the question "Do you enjoy using technological devices?" is presented in Table 6.

**Table 6.**

The distribution of answers to the question "Do you enjoy using technological devices?"

Do you enjoy using technological devices?	<i>f</i>	%
Yes	100	92.6
No	8	7.4
<b>Total</b>	<b>108</b>	<b>100.0</b>

As seen in Table 6, the distribution of pre-service teachers by their answers to the question "Do you enjoy using technological devices?" reveal that 92.6% (100 people) answered "Yes" and 7.4% (8 people) answered "No". This known that students benefit from technology for daily work, we can say that today's students enjoy the technology by looking at the table above.

### 3. Results

In this section the results and discussion related to the findings to determine pre-service teachers' intentions and effort expectancy on the use of online social networking sites for instructional purposes are presented.

One Way ANOVA Results Between Pre-service Teachers' Departments in Their Intentions to Use Online Social Networks in Their Future Professions

In Table 7, One Way ANOVA conducted to determine the values with regards to the departments are presented in determination of the thoughts of pre-service teachers' intentions of using online social networks in their future professions.

**Table 7.**

One Way ANOVA results between pre-service teachers' departments in their intentions to use online social networks in their future professions

Department	N	Mean Rank	SD	X <sup>2</sup>	P
Psychological Counseling and Guidance	43	22.83	3	8.59	.818
	29	22.78			
Classroom Teaching	19	21.79			
Computer Education and Educational Technologies	17	22.73			

As seen in Table 7, in the thoughts of pre-service teachers' intentions of using online social networks in their future professions there is no significant difference between the departments of pre-service teachers ( $\chi^2(3) = 8.59; P=.818; P>0.05$ ). The highest value between the departments in the thoughts of pre-service teachers' intentions of using online social networks in their future professions belong to the department of Psychological Counseling and Guidance while the lowest value belongs to the department of Classroom Teaching. The findings obtained reveal that there is no significant difference between the departments in the thoughts of pre-service teachers' intentions of using online social networks in their future professions and that the thoughts of pre-service teachers' intentions to use online social networks in their future professions are high.

#### One Way ANOVA Results Between Pre-service Teachers' Departments in the Effort Expectancy of Pre-service Teachers for Online Social Networks

In Table 8, One Way ANOVA conducted to determine the values with regards to the departments are presented in determination of the effort expectancy of pre-service teachers for online social networks

**Table 8.**

One Way ANOVA results between pre-service teachers' departments in effort expectancy of pre-service teachers for online social networks

Department	N	Mean Rank	SD	X <sup>2</sup>	P
Psychological Counseling and Guidance	43	26.04	3	44.600	.541
Special Education	29	23.55			
Classroom Teaching	19	25.99			
Computer Education and Educational Technologies	17	26.17			

As seen in Table 8 there is no significant difference in the social effects of online social networks for pre-service teachers between the departments ( $\chi^2(3) = 44.600; P=.541; P>0.05$ ). The highest value in the social effects of online social networks for pre-service teachers between the departments belong to the department of Computer Education and Educational Technologies while the lowest value belongs to the department of Special Education. The findings obtained reveal that there is no significant difference between the departments in the social effects of online social networks for pre-service teachers and it may be inferred that the values for social effects of online social networks on pre-service teachers are high.

#### 4. Conclusions

The results of the study reveal that among the pre-service teachers who participated in the study 12.6% (155 people) use the internet for 2-4 hours, 41.2% (49 people) use the internet for

4-6 hours, 27.8% (30 people) use the internet for 6-8 hours and 11.8% (14 people) use the internet for 8 hours and more daily. In light of the findings obtained the pre-service teachers mostly use the internet for 2-4 hours daily. Moreover 45.0% (51 people) of the pre-service teachers use smartphone, 47.0% (49 people) use portable computers and 8.0% (8 people) use all of the devices. The findings also reveal that the pre-service teachers mostly own smart phones. According to these values and findings it may be inferred that pre-service teachers mostly buy smart phones and mostly use internet for 2-4 hours during the day.

In the light of the findings of the study while it is revealed that in the thoughts of pre-service teachers' intentions of using online social networks in their future professions there is no significant difference between the departments of pre-service teachers; the highest value between the departments in the thoughts of pre-service teachers' intentions of using online social networks in their future professions belong to the department of Psychological Counseling and Guidance and the lowest value belongs to the department of Classroom Teaching. The findings obtained reveal that there is no significant difference between the departments in the thoughts of pre-service teachers' intentions of using online social networks in their future professions and that the thoughts of pre-service teachers' intentions to use online social networks in their future professions are high.

According to the results of the study and the answers given to the question "Do you enjoy using technological devices?", the distribution reveals that 92.6% (100 people) answered as "Yes" and 7.4% (8 people) answered as "No". In light of these findings it may be inferred that pre-service teachers enjoy using technological devices and that they use these devices in their daily lives and that they are pleased. The highest value in the social effects of online social networks for pre-service teachers between the departments belong to the department of Computer Education and Educational Technologies while the lowest value belongs to the department of Special Education. The findings obtained reveal that there is no significant difference between the departments in the social effects of online social networks for pre-service teachers and it may be inferred that the values for social effects of online social networks on pre-service teachers are high.

In line with the purpose of this study as to determine pre-service teachers' intentions and effort expectancy on the use of online social networking sites for instructional purposes, it is important that further research is conducted on the subject of "online social networking sites". It is also important to provide pre-service teachers with seminars on the use of technological platforms and smart devices; teachers should be supported by means of technology regarding the situations that may assist them in their daily lives and their education.

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