

## Pre-service teachers' perceptions of social media – A qualitative survey study in Turkey and Sweden

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### Abstract

The purpose of this study was to investigate pre-service teachers' perceptions of social media. The phenomenology approach, one of the qualitative research methods, was used in the study. The participants of the study included 201 pre-service teachers studying at two state universities, one in Turkey and the other in Sweden, in the spring term of the 2018-2019 academic year. In the study, metaphors were used to reveal pre-service teachers' perceptions of social media. The pre-service teachers were asked to fill in the following query: 'Social Media is like ..... because .....'. The collected qualitative data were analyzed by using content analysis method. The findings indicated that the pre-service teachers from both countries perceived social media mostly as a tool for communication and access to information and that a very few of them associated social media with education. In addition, it was found that pre-service teachers from Turkey had more negative perceptions of social media compared to those from Sweden. The pre-service teachers from Turkey who had negative perceptions associated social media mostly with addiction.

## 1. Introduction

In recent years, we have experienced many technological developments that affect our daily life. One of these technological developments that stand out especially in the lives of young individuals is social networking sites. Social networking site (SNS) is a platform where users can jointly investigate network contents, share their experiences, and establish relations for different purposes such as social and educational purposes (Jiao, Gao, & Yang, 2015). Hughes, Rowe, Batey, and Lee (2012) define social networking sites (SNSs) as a list of virtual user profiles that can be shared with other users. These lists show links to be accessed by other people to the profile of each user (Correa, Hinsley, & De Zuniga, 2010). SNSs provide an environment where people can interact with others (friends, family) (Raacke & Bonds-Raacke, 2008). Although the main purpose of SNSs is to connect people to each other, they also function as platforms that facilitate information and media sharing, interaction and collaboration. Therefore, SNSs can be used for many different purposes in addition to establishing and maintaining social connections (Somroo, Kale, & Zai, 2014). Although users have various reasons for using SNSs, these reasons can be listed mostly as communicating with family and friends, maintaining the communication, meeting new people (Alhabash & Ma, 2017; Balakrishnan & Griffiths, 2017; Boyd & Ellison, 2007; Khan, 2017; Kircaburun, Alhabash, Tosuntaş, & Griffiths, 2018; Lee, Chou, & Huang, 2014), accessing and sharing information (Alhabash &

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Ma, 2017; Balakrishnan & Griffiths, 2017; Khan, 2017; Kırçaburun et al. 2018; Park & Kim, 2013; Sendurur, Sendurur, & Yılmaz, 2015) and entertainment (Balakrishnan & Griffiths, 2017; Khan, 2017; Kırçaburun et al., 2018; Lin, Hoffman, & Borengasser, 2013; Piwek & Joinson, 2016). In a study conducted by Pew Research Center, around seven out of 10 Americans use social media to communicate with each other, share information, entertain and to engage in news contents (Pew Research Center, 2019).

Despite the increasing number of SNSs users in various age groups, university students are still among the primary SNSs users (Lipsman, 2007; Miller & Melton, 2015). For this reason, researchers have investigated the SNS usage of many age groups in population, especially younger generations such as school and university students, in order to understand the applications and the effects and importance of SNSs (Hamade, 2013). Some of these studies focused on the perceptions of university students towards SNSs. According to the findings of these studies, students mentioned the positive aspects of SNSs such as the ability to participate in social, political and cultural activities (Hamade, 2013), academic and social communication (Hamade, 2013; Haneefa & Sumitha, 2011; Iordache & Lamanauskas, 2013; Kitsantas, Dabbagh, Chirinos, & Fake, 2015; Mirabolhasemi, Iahad, & Rahim, 2016; Sendurur et al., 2015), participation in academic and social activities, cooperation and social presence (Mirabolhasemi, Iahad, & Rahim, 2016), studying (Kitsantas et al., 2016), spending leisure time (Iordache & Lamanauskas 2013), accessing and sharing information (Iordache & Lamanauskas, 2013; Kitsantas et al., 2016; Mirabolhasemi, et al. 2016; Sendurur et al., 2015).

On the other hand, some of these studies revealed that students also had negative views about SNSs such as neglecting school/work life and social activities and spending too much time in SNSs (Hamade, 2013; Kitsantas et al., 2016), creating privacy and security concerns, preventing critical thinking, causing social isolation and other negative emotions (Haneefa & Sumitha, 2011; Mirabolhasemi et al., 2016; Sendurur, et al., 2015), distracting attention and addictive behavior. (Kitsantas et al., 2016; Sendurur et al., 2015). Regarding the issue, Iordache and Lamanauskas (2013) asked university students to evaluate the functions of SNSs in order of their importance. The students evaluated and ranked these functions as (1) communication, (2) learning and exchanging information, (3) exchanging the items such as photos and videos and (4) friend search.

### *1.1. Social Media in Education*

The fact that SNSs are so popular among high school and university students made educators think that they can be used for educational activities, and various studies focusing on this subject have been conducted. These studies emphasized mostly the qualities of SNSs which support educational activities in higher education. The qualities mentioned in these studies can be listed as interaction, communication, collaboration, exchange of information and resource (Al-Dhanhani, Mizouni, Otrok, & Al-Rubaie, 2015; Al-Rahmi, Alias, Othman, Marin, & Tur, 2018; Mazman & Usluel, 2010; Sendurur et al., 2015), learning performance and critical thinking (Al-Rahmi et al., 2018; Kara, Çubukçuoğlu, & Elçi, 2020), enhancing learning motivation and experience, increasing motivation, engagement and satisfaction with learning (Hosny & Fatima, 2012; Imlawi, Gregg, & Karimi, 2015), and improving academic performance through collaboration (Al-Rahmi, Othman, Yusof, & Musa, 2015). However, some researchers stated that only a small proportion of young people use SNSs in sophisticated ways that educators might value (Eynon & Malmberg, 2011; Ito et al., 2009). For example, Hew (2011) stated in his review that the education-related usage of Facebook was low and that most of these usages were for administrative tasks such as sending lecture schedules and assignments instead of pedagogical aspects of teaching and learning. In another study, Caraher and Braselman (2010) revealed that students used SNSs to communicate with their classmates, work on assignments, and to some extent, communicate with the faculty members. Selwyn (2009), on the other hand, analyzed the university students' education-related activities on Facebook and reported five main themes as a result of this analysis. These were (1) recounting and reflecting on the university experience, (2) exchange of practical and academic information, (4) displays of supplication and/or disengagement, (5) bantering (e.g. exchanges of humor and nonsense). While most of the research on SNSs

have been done with the general population of university students, similar findings have been found in studies focusing on the views of pre-service teachers about SNSs. In relation to this, Sendurur et al. (2015) and Somroo, Kale, and Zai (2014) reported in their studies that the pre-service teachers' primary reason for SNSs use was communicative needs. In another study, pre-service teachers regarded the benefits of use of Twitter in lessons as establishing contact with educators in and out of class, sharing sources and communicating with each other (Carpenter, 2015). Foss and Olson (2013), on the other hand, found that pre-service teachers appreciated Facebook's ability to maintain their friendships and that they were professionally aware of its possible harmful effects, though.

In general, it is seen that the formal use of SNSs for educational purposes is low and that the education-related use is mostly informal such as communication, cooperation and exchange of information (Caraher & Braselman, 2010; Hew, 2011; Prescott, Wilson, & Beckett, 2013; Selwyn, 2009; Somroo et al., 2014). This probably reveals the fact that students perceive the purpose of SNSs as social rather than academic (Madge, Meek, Wellens, & Hooley, 2009). In addition, as mention above, some studies reported that students had some privacy and security concerns and negative opinions about SNSs. For example, Yaman and Yaman (2014) revealed that the students mostly emphasized the negative aspects of SNSs and did not perceive it as an educational tool. As a result, students' perspectives on SNSs may change the usage of SNSs in educational settings (Dyson, Vickers, Turtle, & Cowan, 2015). For future generations, pre-service teachers are those who will be part of forming educational experiences decades from now and the attitudes, perceptions, experiences, and expectations of those pre-service teachers are therefore important. In this paper, we investigate how pre-service teachers in Turkey and in Sweden perceive social media through metaphors. Although not so common, metaphors have the benefit to investigate perceptions on both a creative and associative level. Metaphor is to understand and experience a phenomenon according to another phenomenon (Lakoff & Johnson, 2005). According to Aydın (2010), metaphor refers to an individual's expressing a concept or a phenomenon in the way s/he understands it with the help of similes. In the present study, the purpose of metaphor use was to reveal pre-service teachers' mental images regarding social media and to better understand social media use. In this respect, the present study aimed to reveal Turkish and Swedish pre-service teachers' perceptions regarding social media via metaphors.

## 2. Literature Review

Recently there has been an increase in the methods used to investigate student perceptions of social media. In a study on self-regulated learning and social media among teachers in the Netherlands, Matzat and Vrieling (2016) found that teachers who practiced self-regulated learning in their classroom were more inclined to use social media. Using a narrative methodology, Turvey (2012) captured and conceptualised perceptions and experiences of teachers on an initial teachers education programme regarding SNSs and professional practice. Using both qualitative and quantitative methods, Neier and Zayer (2015) investigated perceptions and experiences of students in a US university regarding social media in education. The researchers showed that the students viewed some potential in using social media as a learning tool and that the students were however cautious as to which tool and what the purpose could be.

A survey study conducted in Pakistan by Soomro et al. (2014) with pre-service teachers and teacher educators aimed at understanding their experiences and attitudes toward SNSs for collaborative learning showed that their motives were limited to social purposes. Receptoğlu and Ergün (2013) analysed Turkish pre-service teachers' perceptions about their media literacy and found that their perception about their media literacy competence was high. US pre-service teachers' participation and perceptions of twitter was investigated through a multiple case-study design (Luo, Sickel, & Cheng, 2017), showing that prior perceptions had significant impact on the pre-service teachers' perceived usefulness. Kitsantas et al. (2016) examined college students in the US and their perceptions on positive and negative effects of SNS. Perceptions on positive effects included gathering information, communicating, and engaging in studies. Negative perceptions included distraction and emotional health factors. Sendurur et al. (2015) have applied

an open-ended questionnaire to 426 teachers from Turkey in order to determine their views about the daily use of SNSs, and they showed that the most commonly expressed advantage of SNSs is interaction with friends, exchange of files and information about courses. They also stated in their study that SNSs had the potential to be used as educational tools. Finally, pre-service teachers' perceptions of social media were explored through the use of metaphors by Köseoglu (2018) showing that pre-service teachers perceived social media both positively and negatively, as educational, technological, entertaining, and as an integral part of life.

### **3. Methodology**

#### *3.1. Research Design*

In this research, a phenomenology approach was used implying a qualitative research method. Simply, phenomenology can be defined as a research approach that aims to define the essence of a phenomenon from the perspectives of those who have experienced that phenomenon (Teherani et al., 2015). By examining individuals' views about a phenomena they have personally experienced, studies conducted using the phenomenological approach aim to reveal the cognitive structures in their minds (Creswell, 2015). In such studies, open-ended questions could be used as a data collection tool together with the in-depth interview method or written data (Christensen, Johnson, & Turner, 2011).

#### *3.2. Participants*

The participants of the study included 201 pre-service teachers studying at two state universities, one in Turkey and the other in Sweden, in the spring term of the 2018-2019 academic year. While the Turkish sample consisted of 118 pre-service teachers from different departments of faculty of education, the participants from Sweden were 83 pre-service teachers from teacher-training programs spanning from the earlier years of compulsory school to upper secondary school. The participants were determined using the convenience sampling method, one of purposeful sampling methods.

#### *3.3. Data Collection*

In the study, metaphors were used to reveal pre-service teachers' perceptions of social media. In order to reveal the perceptions of the participants with metaphors, a form including an open-ended question (Social Media is like ..., because ...) was prepared. The open-ended question was directed to the Swedish pre-service teachers in English and to the Turkish pre-service teachers in Turkish. Following this, the pre-service teachers were asked to complete the open-ended question given. The data collected from the Turkish pre-service teachers were translated into English, and the data collected from the Swedish pre-service teachers were reported in its original language.

#### *3.4. Data Analysis*

In the study, content analysis method was used to analyze the data collected. Content analysis is a technique mostly used in the social sciences. The main purpose of content analysis is to explicate concepts and relationships that will provide an opportunity to understand the data collected. Through content analysis, phenomena that may be hidden or implicit in the data are articulated, and concepts and themes similar to each other are combined and interpreted in a language that the reader will be able to understand (Yıldırım & Şimşek, 2011).

While analyzing the data, these phases were followed: (1) numbering/elimination, (2) category development, and (4) ensuring validity and reliability.

*Numbering/elimination:* In this phase, each form filled in by the participants was numbered, and the metaphors produced were examined. The statements which were not full or relevant were not included in the analysis. In the end, among the 201 sentences, 193 of them were taken into consideration.

*Category development:* In this phase, a total of 193 statements (81 of them from Swedish pre-service teachers, 112 of them from Turkish pre-service teachers) were associated with a certain theme and divided into groups based on the similarities and differences. By associating each group with a specific theme, 11 categories were created in the Turkish group, and 12 categories were created in Swedish group separately.

*Validity and reliability:* In order to ensure the validity of the study, the data collection and analysis process was described in detail. In addition, the research data were supported with the quotations of the participants. In the study, to ensure the reliability, first, the metaphors were matched with conceptual categories by the two researchers. Following this, an expert on qualitative research was asked to write down the metaphors in the related category. Next, the groupings by the expert and by the researchers were compared. The number of the agreements and disagreements revealed via the comparisons helped determine the reliability of the study. By using the formula put forward by Miles and Huberman (1994), the reliability was calculated. The fit between the expert and the researchers was calculated as 92%. Since this value was over .90, a desirable level of reliability was achieved.

For the analysis of the data, qualitative analysis software, Nvivo 12.0, was used. Frequencies and percentages were used for the interpretation of the data via content analysis. In addition, direct quotations were included to reflect the participants' perceptions on social media.

## 4. Results

The findings obtained from the pre-service teachers with the help of content analysis were evaluated under two headings: the pre-service teachers' perceptions of social media in Turkey and in Sweden.

### 4.1. The Pre-service Teachers' Perceptions of Social Media in Turkey

Themes and examples of metaphors obtained from the pre-service teachers' views on social media in Turkey are shown in Table 1.

**Table 1.**

Themes and examples of metaphors related to the pre-service teachers' perceptions of social media in Turkey

Themes	Sub-Themes	f	%	Examples of Metaphors
Source of information		29	24,4	News source Information dissemination tool
Communication		15	12,6	Communication network Communication tool
Useful or harmful according to use		8	6,7	Something both sweet and also bitter Knife
Part of everyday life		7	5,9	Life Bread-water
Self-presentation/Social comparison		6	5,0	Insincerity Incentive tool
Education		5	4,2	School Computer
Ease		5	4,2	A tool making life easier To get things done shortly
Development		3	2,5	Change
Spending time		2	1,7	Friend
Sharing		1	0,8	Information exchange tool
Game		1	0,8	A game platform
Negative aspects	Addiction	23	19,3	Alcohol Cigarettes
	Waste of time/Nonsense	9	7,6	Waste of time Unnecessary tool
	A tool limiting communication	5	4,2	Non-communication Isolation from society

As can be seen in Table 1, 11 themes were created within the framework of the common features of the perceptions obtained from the pre-service teachers from Turkey. It was found that the pre-service teachers associated social media mostly with the themes of “source of information”, “communication” and “negative aspects”. The other themes were "useful or harmful according to use", "part of everyday life", “self-presentation/social comparison”, "education", "ease", "development", "spending time", "sharing" and "game". When their negative opinions about social media were analyzed, it was seen that three sub-themes emerged as “addiction”, “waste of time/nonsense”, and “the tool limiting communication”.

The pre-service teachers from Turkey who associated social media with the “source of information” mostly emphasized the capabilities of social media such as accessing information quickly and easily and following current news in the world and in their country instantly. Moreover, many pre-service teachers referred to social media as an environment in which they could learn about the lives of others and reflect the information learned:

*"Social media is like a news source because I sometimes learn via social media what I don't know."*

*"Social media is like information exchange tool because we can easily reach a large amount of information and a great number of up-to-date developments with the help of social media."*

Another category that the pre-service teachers associated mostly with social media was “communication”. In this category, the pre-service teachers from Turkey stated that social media facilitated communication and allowed them to keep in touch with distant people and with the family, friends and relatives around them. One of the pre-service teachers stated that social media is the easiest way to stay in touch with the world:

*"Social media is like a communication tool because thanks to social media, I can communicate with distant relatives and friends."*

*"Social media is like a communication network because I can communicate with people around me in this way, and I am aware of them."*

In the category of “useful or harmful according to use”, many pre-service teachers pointed out that social media might have benefits or harms depending on the intention and intensity/amount of its use. The pre-service teachers thought that social media could be beneficial when used consciously in a moderate amount of time or could harm the person if used excessively. One pre-service teacher stated that social media contained useful and harmful information:

*"Social media is both sweet and bitter because its intended use can be true or false. It depends on the person."*

*"Social media is like medicine because it provides benefits as long as it is used correctly and consciously."*

In the category of "part of everyday life", the pre-service teachers perceived social media as a basic need and an indispensable part of their lives:

*"Social media is like food because it has become a mandatory basic need of our lives."*

*"Social media is like bread and water because now it is a must for many of us."*

When the "self-presentation/social comparison" category was analyzed, the pre-service teachers saw social media as a platform where users try to show themselves differently and to reflect their traits in they want and where other people's lives seem to be more attractive:

*"Social media is like incentive tool because other lives are always attractive."*

*"Social media is like utopia because nobody is as smart, beautiful, fun and cool as on social media."*

It was found that the pre-service teachers from Turkey did not associate social media mostly with education and that the pre-service teachers who associated it with education mostly emphasized "access to information" (See Table 2). While some pre-service teachers stated that social media facilitated their education life and that a lot of information about the courses could be accessed via social media, one of the pre-service teachers thought that social media speeded up their research which he/she had done.

*"Social media is like practicality because it is important in terms of facilitating our work and education life."*

*"Social media is like a school because we can get information about the lessons from there."*

The pre-service teachers from Turkey had a lot of negative opinions about social media. When the negative opinions were examined, social media was associated mostly with the category of "addiction" (see Table 1). In this category, the pre-service teachers stated that social media was addictive and difficult to quit after starting to use social media:

*"Social media is like a black hole because there are so many things on social media that attract people, and once you get inside, you cannot get away from it."*

*"Social media is like a cigarette because it is hard to stop once you start using it."*

Another category that the pre-service teachers related mostly to the negative aspects of social media was "waste of time/nonsense". In this category, many pre-service teachers defined social media as a waste of time and emphasized that too much time was spent on social media. Some of the pre-service teachers characterized social media as a tool that prevented the development of individuals and was thus of no use:

*"Social media is like a waste of time because I think it does nothing but a time loss."*

*"Social media is like an unnecessary information pit because the individuals' intended use is not at a level to benefit people."*

#### 4.2. The Pre-service Teachers' Perceptions of Social Media in Sweden

The categories obtained from the views of the pre-service teachers from Sweden about social media are shown in Table 2.

**Table 2**

Themes and examples of metaphors related to the pre-service teachers' perceptions of social media in Sweden

Themes	Sub-Themes	f	%	Examples of Metaphors
Communication		51	39,8	A network A meeting place
Source of information		34	26,6	A knowledge bank A news feed
Sharing/Social presence		8	6,3	Visibility Confirmation
Self-presentation/Social comparison		8	6,3	Ideal body Peer pressure
Education		6	4,7	Teaching tool Inspiration tool
Ease		4	3,1	Easy way to keep in touch Easy access
Entertainment/Stress relief		3	2,3	A relaxation place
Part of everyday life		2	1,6	A natural part of everyday life
Shopping		2	1,6	Marketing in fitness
Development		2	1,6	A supplementary world
Source criticism		2	1,6	Source criticism

Spending time		1	0,8	Pastime
Negative aspects	Waste of time/Nonsense	3	2,3	Nonsense
	Addiction	2	1,6	Excessive

As can be seen in Table 2, 12 different themes were created within the framework of the common features of the perceptions obtained from the pre-service teachers from Sweden. The pre-service teachers in Sweden associated social media mostly with “source of information” and “communication”. The other categories were "negative aspects", "sharing/social presence", “Self-presentation/Social comparison”, "education", "ease", "entertainment/stress relief", "part of everyday life", "shopping", "development", "source criticism" and "spending time". When the negative opinions about social media were analyzed, two sub-themes emerged as “waste of time/nonsense” and “addiction”.

The pre-service teachers from Sweden associated social media mostly with "communication" (see Table 2). In this category, the pre-service teachers from Sweden associated social media mostly with communicating and maintaining contact with family, relatives and friends around them and with whom they often could not meet face-to-face in real life. Some of the pre-service teachers emphasized such capabilities of social media as communicating quickly and easily, meeting new people, reaching many people at the same time, using multimedia (such as pictures, videos) in communication and holding social meetings:

*“Social media is like communication system because you can have contact with many in a simple way and with people all over the world. “*

*“Social media is like a communication network because I can communicate with my friends, get to know new people and maintaining contacts ”*

Another category that the pre-service teachers from Sweden associated mostly with social media was “source of information”. In this category, the pre-service teachers associated social media mostly with being aware of the events which developed around the world and which were related to different interests, activities and magazines. Some pre-service teachers stated that they could access all kinds of information on social media:

*“Social media is like a knowledge bank because everything is available online”*

*“Social media is like a news feed because news about what's happening in the world is easy to reach and is collected in one place today.”*

In addition, in the context of “source of information”, most of the pre-service teachers used expressions for social media like getting information easily about what people do in their personal lives and about their thoughts, while some pre-service teachers perceived social media as a way to get inspiration from other people:

*“Social media is like a source of information because I use it daily to find info and keep me updated on what friends and relatives do.”*

*“Social media is like inspiration because you can observe and draw inspiration from others.”*

In the context of “sharing/social presence”, the pre-service teachers associated social media mostly with information and photo sharing. In addition, they emphasized such capabilities of social media such as attention-drawing, confirmation and social presence:

*“Social media is like confirmation because I get attention”*

*“Social media is like visibility because it is to get likes and views. It's good to be seen.”*

In the context of “self-presentation/social comparison”, the pre-service teachers perceived social media mostly as a platform where people gave a positive or unrealistic image about themselves and compared people's lives with others to get social acceptance:

*“Social media is like a peer pressure because you must perform in order to be socially accepted. People compare their lives with each other and no one would be worse than others.”*

*“Social media is like ideal body because they show things that are either not true or publish such that gives a favorable image of themselves”*

The pre-service teachers from Sweden did not associate social media mostly with “education” like the pre-service teachers from Turkey, and the teachers who associated it with "education" perceived social media mostly as an informal learning tool. In this category, the opinions of the pre-service teachers were gathered under three sub-themes: communication, exchange of information and inspiration. It was found that the pre-service teachers associated social media mostly with communicating with their classmates and colleagues. They also stated that groups could be created on social media and that information could be shared via these groups quickly. Some pre-service teachers used expressions for social networks as a way of getting inspiration from different ideas in creating more educational materials and creative activities:

*“Social media is like teaching tool because it (Facebook) is easily accessible and it is easy to connect with others in the class, and groups that are working on similar things, for example ‘thing of the day’, a way to work in school.”*

*“Social media is like inspiration tool because you can find inspiration for the creation of educational materials and other creative activities. It is easy to search for what you are interested in, so you can get ideas for teaching aids among other things.”*

## 5. Discussion

According to the findings of the present study, the pre-service teachers from Turkey associated social media mostly with the categories of "negative aspects", "source of information" and "communication", while a majority of pre-service teachers from Sweden associated social media with "communication" and "source of information".

The pre-service teachers from Turkey and Sweden who viewed social media as a source of information referred to social media's ability to access information quickly and easily, to learn about others' thoughts and lives, to follow current news and events. The pre-service teachers in Sweden differently from those in Turkey perceived social media as a way of getting inspiration from other people. In addition, the pre-service teachers from Sweden emphasized getting information about people's lives and thoughts more than the teachers from Turkey. Similarly, a study with Swedish participants found that a vast majority of participants viewed Facebook as a way to update information about their friends' lives (Denti et al., 2012). In addition, the pre-service teachers in both groups did not place much emphasis on sharing, and they associated social media mostly with access to information. According to the results of the present study, it could be stated that the pre-service teachers mostly used SNSs for viewing rather than posting and were passive recipients of information, and these findings support those of Hamade (2013). According to another finding of the present study, the pre-service teachers from Sweden who associated social media with communication perceived it as an easy way to keep in touch with people whom they often could not meet in real life and to communicate with friends, family and relatives. Similarly, the pre-service teachers from Turkey perceived social media mostly as a way to communicate with family, friends and other people. Similar findings were found in other studies conducted with pre-service teachers and university students in literature. For instance, in a study conducted with pre-service teachers from Turkey, the main reason for the pre-service teachers' SNS usage was to communicate with friends whom they did not meet frequently (Sendurur et al., 2015). When studies carried out in Sweden are examined, it is similarly seen that the main reasons for using

Facebook are to communicate and to maintain existing social contacts (Aghazamani, 2010; Denti et al., 2012). Although they may differ in certain Internet applications, people often use internet technologies to access information in a practical way, spend their free time and communicate properly with others (Alhabash & Ma, 2017; Balakrishnan & Griffiths, 2017; Khan, 2017; Kim, Sohn, & Choi, 2011). Similarly, in many studies conducted with university students in literature, it is reported that the positive aspects of SNSs and the reasons for primary use are mostly communication and access to information (Hamade, 2013; Haneefa & Sumitha, 2011; Kitsantas et al., 2015; Mirabolghasemi et al., 2016; Pempek, Yermolayeva, & Calvert, 2009; Sendurur et al., 2015). In the present study, the pre-service teachers might have associated social networks mostly with sources of information and communication as they mostly used social media to communicate and access to information.

According to another finding of the study, the pre-service teachers from Turkey and Sweden associated social media with self-presentation/social comparison. In this category, the pre-service teachers perceived social media as a platform where people compared their lives with each other and gave an unreal or positive image about themselves to receive social acceptance. Facebook is an attractive platform for self-presentation because users can take their time to strategically construct online personalities that emphasize the traits they desire mostly (Gonzales & Hancock, 2011). The structure of SNSs suitable for self-presentation and other opportunities that are provided by SNSs may affect social comparison activities and results (Cramer, Song, & Drent, 2016). Given SNS users' access to more people than ever before (Denti et al., 2012), the density of information and the wide range of available multimedia content, Facebook and other relevant SNSs provide an ample opportunity to make social comparisons (Denti et al., 2012; Haferkamp & Kramer, 2011; Vogel, Rose, Roberts, & Eckles, 2014). On these sites, people tend to present themselves positively in their social network profiles (Chou & Edge, 2012; Denti et al., 2012). For example, Denti et al (2012), who conducted Facebook-related studies in Sweden, stated that the participants shared things that were positive or important, and the distress and bad emotions were less common. He also noted that younger users were more likely to make social comparisons because they spent more time on Facebook.

In the present study, the pre-service teachers from Turkey had a high level of negative opinions about social media, but this level was low for those from Sweden. The pre-service teachers from Turkey mostly stated that social media was addictive and that a lot of time was spent on social media. In addition, some pre-service teachers viewed social media as a useless tool. When studies in literature are reviewed, similar findings were obtained in previous studies conducted with pre-service teachers from Turkey (Erdem, Alkan, & Erdem, 2017; Köseoğlu, 2018; Sendurur et al., 2015). In some studies, university students in Turkey were social media addicts at moderate and low levels (Keçe, 2016; Kırçaburun, 2016; Şahin, 2017). Also, according to the 2020 report of We are Social Media Agency, which examined individuals' daily average usage time of social media, Turkey is above the world average ranking the 15th among 46 countries (2.51 minutes), while Sweden is below the world average ranking the 35th (1.48 minutes) (Kemp, 2020). Accordingly, pre-service teachers in Turkey might have emphasized addiction more than those in Sweden as they spend much more time in SNSs.

In the context of education, pre-service teachers from Turkey emphasized social media's capability of accessibility to information about the lessons. On the other hand, the Swedish pre-service teachers mostly used expressions to communicate with their classmates and colleagues for social media. They also emphasized social media's abilities of inspiration from others and exchange of information through groups in the process of creating educational materials and creative events. It could be stated that the great majority of pre-service teachers in both groups did not associate social media with education directly, and those who associated emphasized mostly the informal use of social media in education. It is reported in many studies that pre-service teachers use SNSs for educational purposes at a low level and that they use them mostly for social purposes (Hughes et al., 2015; Sendurur et al., 2015; Somroo et al., 2014). In addition, similar findings were obtained in other studies conducted with university students. For example, as a result of review of the literature, Hew (2011) found that the educational Facebook usage of students and teachers

was low. Hrastinski and Aghae (2012) stated that Swedish university students used SNSs extensively, but few of them felt that they used SNSs to support their academic studies. Its use for educational purposes is mostly for short questions and answers and to coordinate group work and to share files. Prescott et al. (2013) stated that university students are cautious about using SNSs as a formal learning tool, and they are willing to use it mostly for lessons related to communication and informal learning enabling access to information and resources. These studies support the findings of the present study.

## 6. Conclusion and Future Research

In this study, the pre-service teachers' perceptions of social media in Turkey and Sweden were investigated through the use of metaphors. According to the results of the present study, the pre-service teachers in both Turkey and Sweden perceived social media mostly as a tool for communication and access to information, and a few of them perceived it as a tool for education. SNSs have been claimed to have the potential to increase the quality of teaching activities in teacher education (Sendurur et al., 2015). Failure of pre-service teachers to raise awareness of the educational potential of SNSs may affect their use of SNSs as an educational tool in the future. Vidal, Martínez, Fortuño, and Cervera (2011) stated that the greater the awareness and use of SNSs, the greater the expected educational benefit. In this context, it will be an important contribution for teacher educators to realize more applications to support the use of SNSs in formal or informal ways in order to expand awareness about the use of SNSs in educational environments. Therefore, more research is needed on different teaching methods and techniques that can help instructors make decisions to increase the effectiveness of the use of SNSs in educational settings. Another finding of the present study was that the pre-service teachers especially in Turkey had a high level of negative perceptions of social media. This rate was low for the pre-service teachers in Sweden. Although there are some discussions about the reasons for this result in the present study, in-depth qualitative research may be conducted in the future.

This study focused on pre-service teachers' perceptions of general social media. Information about which SNSs are used by participants and their experiences related to this use were not included in this study. There are differences and similarities between SNSs such as Facebook, Twitter and Instagram. Therefore, different experiences of pre-service teachers about different SNSs may change their perceptions regarding SNSs. In this context, the inclusion of more specific information about pre-service teachers' SNS usage in future studies could help reveal pre-service teachers' perceptions of SNSs. Additionally, this study was conducted by collecting qualitative data from a limited number of participants from two universities in Turkey and Sweden. For this reason, quantitative studies to be conducted using a questionnaire with a higher number of participants could yield different results, and these findings could be generalized to a larger population.

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