The Relationship between Computer Self-Efficacy and Social Network Usage Aims of Information Technology Teacher Candidates[*]

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Abstract

Problem Statement: The concept of self-efficacy is important in social learning theory. It refers to an individual's self-judgment about his/her fulfillment capacity at self-arranged activities to carry out a specific performance. Computer self-efficacy refers to the individual's perceived computer skills to perform a computer task. The social networks, arising with Web 2.0, are structures in which individuals create communities and introduce people to these communities in a virtual environment and communicate with the other people of similar cultural backgrounds. People who can use computers and other technologies effectively are needed in a rapidly changing information society. Raising technologically-equipped individuals has increased the education environments enriched with information technology (IT) and the importance of IT teachers in the educational system. As one of the most used technologies is social network technology, the future IT teachers' aim in this arena and the effect of this situation on computer self-efficacy are important.

Purpose of Study: The aim of this study was to determine the relationship between the social network use aims of the IT teacher candidates and their computer self-efficacies.

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Methods: A correlational model has been used in research studies. Data from research, demographic information developed by researchers, a computer self-efficacy belief scale, and a social network aim determining scale were used. The students who participated in the study attended a university located on the east side of Turkey in the 2013-2014 academic year in the Department of Computer Education and Instructional Technologies Education. A total of 189 second-, third-, and fourth-grade students in the Computer Education and Instructional Technology comprised the study group. The collected data were analyzed by a statistical data analysis program.

Findings and Results: According to research findings, the computer self-efficacy belief of the participants (X=3,39) is found by calculating the average of points scored from a self-efficacy questionnaire of computer use, completed by the participants in the research study.

Conclusion: No significant relationship was found between computer self-efficacy and gender, class, mothers' attitudes, mothers' education, fathers' attitudes, or fathers' education. However, a significant relationship was found between the purpose of a person's social network and his or her gender, class, mother's attitudes, mother's education, father's attitudes, and father's education. No strong relationship was found between the social network usage aims of CEIT students and their computer self-efficacy.

Keywords: Information technologies, self-efficacy, social media

Introduction

People who can use computers and other technologies effectively are needed in a rapidly-changing information society. The need to raise technologically-equipped individuals has increased in the education environments that are enriched with information technology (IT), which has also raised the importance of IT teachers in the educational system. One of the most used technologies is the social network technology. Future IT teachers' goals for social network technology use and the effect of their attitudes on students' computer self-efficacy therefore are important.

Developed by Bandura (1977), the self-efficacy concept is important in social learning theory. It refers to an individual's self-judgment about his/her fulfillment capacity to conduct a specific performance during self-arranged activities. According to this definition, the belief of how good the person needs to perform at the activities they set out to undertake is defined as self-efficacy. Scientists refer to different definitions of self-efficacy in their studies in the literature.

According to Schunk and Rice (1987), the self-efficacy belief refers to the ability to control emotional performance in which the individual deals with problems from his/her previous experiences. Ipek and Acuner (2011) believe that self-efficacy is not

the state of how skilled an individual is but what the individual can do with these skills. Akkoyunlu and Orhan (2013) assert that the self-efficacy belief is the persistency level that affects the bad or good decision-making when dealing with problems.

Self-efficacy is an important concept in terms of learning. It is even more important in the realm of student-centered approaches. Furthermore, self-efficacy has an effective role in the achieving stage. According to research studies, people who have ample self-efficacy are most likely to succeed in any field; meanwhile, people who do not have much self-efficacy are conversely less confident when confronted with technological innovation and show a sense of reluctance to use computers (Timur et al., 2013). The concept of self-efficacy is linked to numerous components in different fields including in the private field, as has been examined generally by now (Soylemez & Oral, 2013). Another one of these fields is computer self-efficacy.

Computer Self-efficacy

Usage of computers in education is a must in our current technology. It is expected that the people who use computers have high computer self-efficacy perception. For this reason, it is important to define future IT teachers' computer self-efficacy. Computer self-efficacy is described as, "the judgment of person related to proficiency in the use of computers" by Compeau and Higgins (1995). In other words, computer self-efficacy is defined as the belief of the person in identifying how equipped he/she is to handle the computer tasks that have been set out to be accomplished. To make it more clear, it is the individual's perception of their own skills to perform a task on the computer (Timur et al., 2013).

Computers have crucial importance in education. To assure that the next generations are computer literate and to popularize the computer as a teaching tool are the obligatory responsibilities of IT teachers. In this context, the self-efficacy perception of teacher candidates as related to their use and assessment of computers should be high (Akkoyunlu & Orhan, 2003). It has been shown that individuals with a strong sense of computer self-efficacy are more enthusiastic about computer use and learning computer-based applications. They are also more solutions-focused when they face a problem (Soylemez & Oral, 2013).

According to Bandura, self-efficacy influences activity selection, effort, and determination. Use of information and communication technology (ICT) in education has a positive influence on self-sufficiency needs, self-confidence, and, consequently, on people's computer self-sufficiency (Tekerek et al., 2012). ISTE (International Association of Technology in Education) and NCATE (National Council for the Accreditation of Teacher Education) have decided to integrate the technology in teacher training programs and restated teachers' qualifications to require that teachers be computer literate and use technology in the classroom environment. Teachers also need to know how to teach students computer usage skills, to equip the classroom environments with technology, and to cooperate with colleagues via

the internet (Timur et al., 2013). After these decisions, the Turkish Board of Higher Education changed the curriculum in the graduate programs, with the goal of raising computer literate individuals' ability to use developing technology. Increasing technological advancement over time carries with it concepts such as self-efficacy, computer self-efficacy, ICT, and computer literacy. In recent years, there has been a transformation in social life and the environment, with social communication and social relations due to information technologies (Karal & Kokoc, 2010). With this social transformation, the internet has become a necessary instrument. Quite a different era began with Web 2.0 applications. Considering that future IT teachers are well integrated into network technologies, it is important to examine their aims in using new technologies. One of the most important components of this Web 2.0 technology is the advent of social network websites.

Social Networks

One of the most commonly used technologies at the present time is social network technology. A social or public network consists of the individuals who are connected to each other via one or more social networks who shape that social network (Ozmen et al., 2011). In other words, the social networks, built on Web 2.0, are structures in which individuals create and engage with communities in a virtual environment to communicate with other people of similar cultural backgrounds (Belk, 2014).

The social network websites (e.g., Facebook, MySpace, Friendster) are where the individuals create their profiles on a registered system, which is open or semi-open to the public. They are then able to share links, their list of online friends, relationship status, "likes", and activities. They can also send e-mails and messages, create a discussion group, voice chat, or share videos or documents (Boyd & Ellison, 2007). Via these features, individuals can communicate with each other in online communities, contact other people with similar cultural backgrounds, and publish their personal data, work, photos, and files online. They can also create or join an online organization (Deperlioglu & Kose, 2010). Social network sites have had many negative effects in addition to positive ones (Karal & Kokoc, 2010). However, in some studies in which student participants have been asked to explain the pros of social network services, they stated that they feel more comfortable on social network websites because they can get help and share information for educational reasons. Nevertheless, they have also mentioned spending long hours on a social network site and described the negative effects this has had on study productivity.

Computer and internet use have become irreplaceable in social life, invalidating variables like age, job, social status, and physical environment. Computer and internet use, by children and adults, increases day by day. Social networking sites in parallel with this increasing internet use are communication platform preferred frequently (Baran & Ata, 2013; Hopcan & Yilmaz, 2013). This situation reveals a probability that users of information technologies influence computer self-efficacy positively. Some of the most frequent users of ICT are students who study in the university department related to computers. This group uses ICT intensively in both

daily life and learning life. So computer efficacies of this group are expected to be high. Along with the social services, which is a subsidiary product of IT, the communication methods through the IT have changed and the main communication has been replaced with a platform in which shares performed out of turn. This situation has raised questions like why and for which reasons do young people use social networks. The students in the computer-based departments have prioritized social network use both in their daily and academic lives. As for these students who live with social networks in almost every way, for what purpose do they use these social networks? In addition, it is important to examine the main social network usage habits (such as for sharing music and videos, or benefitting from it as an assistance platform via creating friends' groups, etc.) of the Computer Education and Instructional Technology (CEIT) students. It should be noted that participants in our study are expected to have high computer self-efficacy as they are already enrolled in a computer literate program. Nevertheless, this study will investigate whether social network usage affects this efficacy or not.

In this context, the aim of this study was to determine the relationship between the social network use aims of the IT teacher Candidates and their computer self-efficacies. The study also has the following research questions:

- Is there any significant difference in term of computer self-efficacies among participants based on their demographic specifications (i.e., gender, age, class, parents' educational levels, or parental attitudes toward their children)?
- Is there any significant difference in terms of the social network use aims of participants based on their demographic specifications?
- Is there any relationship between participants' computer self-efficacies and their social network use aims?

Method

Research Design

A descriptive correlational model has been used in research studies. According to Buyukozturk et al. (2010), correlational research is research in which the relationship between two or more variables is examined without the intervention of any of these variables.

Research Sample

The study group was comprised of 380 students who were enrolled in the department of CEIT in a university located on the east-part of Turkey and who were in their second, third, or fourth year in the department. A willing (opportunity) sampling method was used to collect data from the participants. This method uses people from target population available at the time and willing to take part. It is based on convenience. The students were asked to complete research instruments. A

total number of 189 students completed and returned the research instruments with the 49, 7 % rate of return. A general profile of the study group is shown in Table 1.

Table1.

Distribution of students who participated in the study according to certain variables.

	N	%
GENDER		
Female	97	51,3
Male	92	48,7
	N	**%**
CLASS		
2.class	42	22,2
3.class	89	47,1
4.class	58	30,7
MOTHER`S EDUCATION LEVEL		
None	54	28,6
Primary School	91	48,1
Secondary School	22	11,6
High School	15	7,9
University	7	3,7
FATHER`S EDUCATION LEVEL		
None	9	4,8
Primary School	64	33,9
Secondary School	40	21,2
High School	41	21,7
University	35	18,5
MOTHER`S ATTITUDES		
Preventive	132	69,8
Democratic	28	14,8
Disinterested	5	2,6
Authoritative	19	10,1
Other	5	2,6
FATHER`S ATTITUDES		
Preventive	93	49,2
Democratic	39	20,6
Disinterested	9	4,8
Authoritative	38	20,1
Other	10	5,3

As shown in Table 1, participants' equilibrium distribution ranged according to gender variance. This allocation provides a base upon which to compare computer self-efficacy and social network usage aims depending on the gender variable. Differences in the fathers' education levels and mothers' education levels can also be seen. The majority of students stated that their mother's education level was primary

school but a minority of students stated that their mother was a university graduate. The majority of students stated that their father's education level was primary school but a minority of students stated that their father had no education. It can be seen that mothers are more conservative than fathers. It is possible that mothers' natures are much more emotional or limited depending on their highest level of education attained. It may also be considered that the preventive attitudes of the parents may lead to their young being raised in a virtual aquarium shaped by the parents having difficulty in adapting to their environment and life, and that this issue results in decrease of their children's self-efficacy. As far as the availability of a personal computer, almost 98 percent of participants had a computer or a laptop. Their department of study may have influenced this situation.

Research Instruments and Procedure

The instrument used in the current study consisted of three sections. The first section aimed to obtained participants' demographic information. The second section aimed to obtain participants' computer self-efficacy levels. Thus, a questionnaire developed by Sensoy (2004) was used. Its internal consistency coefficient value was calculated as 0.89. Originally, the instrument included 31 items; however, 16 items were dropped from the study due to the department of participants in the current study. The last section measured participants' aims for social network use. To this end, a questionnaire that was developed by Karal and Kokoc (2010) was used. The questionnaire consisted of 14 items with the value of 0.83 as the internal consistency coefficient.

Data analysis

The collected data were analyzed by a statistical data analysis program (SPSS). Frequency, percentage, arithmetic means and standard deviations were used to analyze demographic information. Also, t-test and ANOVA were used to examine the possible differences among participants based on their demographic information. Moreover, correlation values were calculated to investigate the relationship between participants' computer self-efficacy and their aims for social network usage.

Results

The results of gender differences based on participants' computer self-efficacy levels are given in Table 2. According to the results, there were no significant differences between male and female participants' self-efficacy levels.

Table 2.

t-test Results Comparing Males and Females on Computer Self-efficacy

Gender	N	M	Sd.	T	Sig.(2-tailed)
Female	97	3,3759	,29724	-,664	,508
Male	92	3,4080	,36446		

Table 3 provides the results related to the association between participants' computer self-efficacy level and their parents' educational level. No significant difference was found.

Table 3.

The Difference Comparing Parents' Educational Level on Computer Self-efficacy

Mother's Educational level	N	M	Sd.	Sig.	Father's Educational level	N	M	Sd.	Sig.
No Education	54	3,33	,26		No Education	9	3,15	,49	
Primary School	91	3,45	,37		Primary School	64	3,42	,35	
Secondary School	22	3,34	,35	,304	Secondary School	40	3,42	,39	,216
High School	15	3,36	,30		High School	41	3,37	,22	
University	7	3,36	,25		University	35	3,39	,27	

Depending on the class, computer self-efficacy scores of the participants are examined. When computer self-efficacy perceptions of information teacher candidates are examined according to the class that they study in, there is no significant difference between them.

Table 4.

The Difference Comparing Attitudes of the Parents towards Their Children on Computer Self-efficacy

Mother's Attitude	N	M	Sd.	Sig.	Father's Attitude	N	M	Sd.	Sig.
Preventive	132	3,40	,32		Preventive	93	3,40	,35	
Democratic	28	3,41	,32		Democratic	39	3,45	,31	
Disinterested	5	3,11	,24	,044	Disinterested	9	3,24	,24	,070
Authoritative	19	3,48	,35		Authoritative	38	3,40	,27	
Other	5	3,08	,52		Other	10	3,15	,38	

Table 4 shows the relationship between the attitudes of the parents towards their children and the participants' computer self-efficacy. No significant difference was found except for one dimension under parental attitude. It was found that for parents who were categorized as disinterested, there was a significant difference in the mother's attitude statistically ($p < ,05$). In order to determine the differences arising from the group or groups, the Scheffe test was carried out. From the results of the Scheffe test, computer self-efficacy perception was not found to differ between groups.

The reasons for teacher candidates' usage of social networks were questioned and general findings were examined. Based on the findings, participants stated that they used the social network sites to join the groups, contact old friends, share their ideas with others, share the things they liked, and see updated information instead of meeting and getting to know new people from different cultures, or learning a foreign language. Regarding the purpose of examining the lives of people they are interested in, the students were undecided on the "I'm using" option. It was further examined whether or not the social network usage aims differed according to gender.

Table 5.

The Difference Comparing Males and Females on Social Network Usage Aims (Only items had difference)

Items	Female (M)	Female (Xp)	Male (M)	Male (Xp)	Sig.
i2	2,16	1,10	2,75	1,21	,037
i4	1,91	1,03	2,46	1,22	,014
i5	4,14	,95	3,82	1,12	,016
i10	3,34	1,24	3,60	1,03	,009

As can be seen from Table 5, there is a significant difference between the age variable and the aims, such as, "I use social networks to meet new people/to start new friendships", "I use social networks to be known by the other people", "I use social networks to research a school project" and "I use social networks to join interesting groups". The share of male participants choosing "I use social networks to meet new people/to start new friendships or to be known by the other people" was greater than the share of female participants who made that choice. When compared with males, female participants more often than males stated that "I use social networks to research my school/project/homework".

Table 6.

The Difference in Comparing Some Variables on Social Network Usage Aims (Only items had that had differences)

Comparing class			
Items	F	Sig.	Differentiation
i1	3,227	,042	No
i11	7,567	,001	2-3 th. Class and 2-4 th. Class
Comparing mothers' attitudes			
Items	F	Sig.	Differentiation
i2	4,797	,001	authoritative-preventive and authoritative-democratic
i6	2,547	,041	
i8	2,447	,048	
Comparing parental attitudes			
Items	F	Sig.	Differentiation
i5	3,263	,013	-
i7	2,794	,028	-
i8	3,623	,007	-

As shown in the Table 6, a significant difference shows up between class variance for respondents who chose the option, "I use [social networks] for providing change to create specifically (profile, personal page…)" and "I use [social networks] for

sharing the articles I like (video, picture, note…)". As mentioned earlier, the Scheffe test was conducted in order to determine the difference observed in the groups. As a result, for the phrase, "I use [social networks] to provide change to create specific fields (profile, personal page)" there were differences found between 2nd / 3rd and 2nd / 4th year students. This difference may be the result of the students' social network usage experience increasing. For the phase "I use social networks to share articles I like", no differentiation was found between groups.

In addition, for the item, "I use [social networks] to examine education-related groups and activities", a significant difference was found between "mother" and "educational level". The Scheffe test was conducted to determine how the difference and a change in the mother's educational level change (primary school, high school, University, etc.) affected the aims of students (when using social networks). It is thought that this situation resulted from being raised with the awareness of their children by their mothers.

No significant difference was found when the level of parental education and social network usage aims were compared. The difference varied depending on the level of mothers' education.

 Moreover, respondents who chose, "I use social networks for meeting new people and making new friends", "I use social networks for observing the people I'm interested in and my friends", and "I use social networks for observing education-related groups and their activities", were related with significant differences found in mothers' attitudes. When the Scheffe test was conducted, it was found that there was a significant difference between the mothers' influence "I use social networks for meeting new people and making new friends" in terms of if the mother had an authoritative or democratic attitude. The groups, which have differentiation, do not separate in other items. This situation leads the individual student to have introverted attitudes and communication problems. These results are considered to be caused by this condition.

As shown in Table 6, there was a significant difference between fathers' attitudes and "I use social networks for doing research related to school projects/homework", "I use social network for communicating with my friends again", and "I use social networks to observe education-related groups and their activities". The Scheffe test was administered to determine this difference, but there was no differentiation found between groups.

Conclusion

In this study, the participants' computer self-efficacy beliefs were examined in relation to demographic information. Results are described below. No significant difference was found in the computer self-efficacy beliefs. Second-grade students' beliefs were of on average level, as were those of third-grade and fourth-grade students.

Computer self-efficacy belief levels of participants were examined according to other demographic information and no significant differences were found. The

results of research on the reasons for using social networks and related demographic specifications follow. A significant difference was found between "gender" and "I use [social networks] for meeting new people / making new friends", "I use social networks in order to be known by other people", "I use social networks for doing research related to school projects/homework", and "I use social networks to participate in groups I'm interested in".

There is also a significant variable between the class and the item, "I use social networks to create my own personal area, profile on a site" and "I use social networks to share the things I like (videos, photos, or not)" and it has been seen that this difference was significant between second- and third-grade students. A significant variable was found between class level and the article "I use social networks to meet new people/to start new friendships", "I use social networks to examine the lives of people I'm interested in", "I use social networks for educational reasons" and the mother's attitude variable.

Significant differences were found between mothers' attitude and the choice of "I use social networks for examining proposed educational groups and their activities". The significant difference between "I use social networks to examine the lives of people I'm interested in" and "mother's attitude" has been considered the difference between an "authoritarian-preventive attitude" and an "authoritarian-democratic attitude". It has come to light that there is significant difference between fathers' attitudes and "I use social networks to do research for my school project/homework", "I use [social networks] for communicating with former friends", and "I use effort examining purposed educational groups".

It has not been found that there is any strong relationship between social network usage aims of CEIT students and their computer self-efficacy. The two variables were not strongly correlated, $r(189) = .41$, $p < .01$. On the basis of the results, it can be defended that the computer self-efficacy level does not affect the social network usage aims. Since it is impossible to follow the development and various usage of new technologies that directly affect our daily lives, as there are many interrelated variables concerning those technologies. However, when examining the findings of the current study and the previous studies, we found that variables related ICT are not very interrelated with each other as it would be expected. We also found that there are differences between person's usage competencies of any technology and its aim of usage.

In this research, computer self-efficacies, irrespective of demographic variables, were found to be at the medium level for all participants. The main reason for this may be that participants are students of CEIT. The computer self-efficacy may not vary. This does not mean that everyone uses social networks with the same purpose. Therefore, social network usage aims of participants have varied on some demographic variables. An example is shown that male participants use social networks to make new friends and to meet new people more than females.

Discussion

The computer self-efficacy levels of males and females were both of an average level. There was no significant difference due to participants' gender. A study by Seferoglu (2005) on CEIT students similarly concluded that male students have a better perception of self-sufficiency on computers than female students. In studies by Gulten vd. (2010), Cetin (2008), Topkaya (2010), and Ipek ve Acuner (2011) about computer self-sufficiency, the researchers found a meaningful difference in favor of male students. But Akkoyunlu and Orhan (2003), Yilmaz et al. (2006), Korkut and Akkoyunlu (2008), and Tuncer and Tanas (2011) in their studies could not find a meaningful difference in the perceptions of computer self-sufficiency of male and female students.

There was no difference in computer self-efficacy perceptions between females and males. This result is parallel to Timur et al. (2013) and Soylemez and Oral's (2013) studies. In spite of that, it is seen that males have higher computer self-efficacy perceptions than females.

Depending on the class, computer self-efficacy scores of the participants were examined. There was no significant difference between them statistically. The computer self-efficacy perception, according to some researchers in literature, did not change according to class as this research study found (Timur et al., 2013; Ipek & Acuner, 2011).

There was no significant difference in students' computer self-efficacy on mothers' education or fathers' education. Different results were found in Cetin's (2008) study. It is considered that this situation arises from important differences in the sample number of the studies.

Some items that include significant differences of the age variable and social network usage aims have been given. In other words, a significant difference was found between age variable and the aims chosen, such as, "I use social networks to meet new people/to start new friendships", "I use social networks to be known by other people", "I use social networks to do research about my school project", and "I use social networks to join interesting groups". More male participants chose the statement, "I use social networks to meet new people/to start new friendships or to be known by the other people" than female participants did. Females more than males stated that "I use a social network to do research for my school/project/homework". It was found by Karakus vd. (2011) that using Facebook by gender does not become different according to communication purpose or educational purpose.

Suggestions

The main limitation with this study was collecting the data only from a department of the Faculty of Education where the researchers were working. This is due to the fact that this study was conducted on CEIT students who were teacher candidates and who already had no problem with using ICT technologies. The study should be extended to different departments and faculties. New studies with larger

samples must be directed at determining self-efficacy and social network use. Different scales about social network use and self-efficacy for different levels of age or education must still be developed. Nowadays, social networks have become an indispensable part of human life. Teacher candidates must be encouraged to use social networks correctly for communication.

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Bilişim Teknolojileri Öğretmeni Adaylarının Bilgisayar Öz yeterliği ile Sosyal Ağ Kullanım Amacı Arasındaki İlişki

Özet

Problem Durumu: Hızla değişen bilgi toplumunda bilgisayar ve diğer teknolojileri aktif şekilde kullanabilen birey ihtiyacı gün geçtikçe artmaktadır. Teknoloji donanımlı bireylerin yetiştirilmesi bilgi iletişim teknolojileri(BİT) ile zenginleştirilmiş eğitim-öğretim ortamlarının yaratılmasını ve dolayısıyla bilişim teknolojileri öğretmenlerinin eğitim-öğretimdeki önemini artmıştır. Günümüzde en çok kullanılan teknolojilerden biri de sosyal ağ teknolojileridir. Sosyal ağlar özellikle gençleri çok cezbeder. Bu ağlar aracılığı ile gençler yeni sosyal çevre, yeni paylaşma ortamları ve yeni öğrenme ortamları elde ederken, istenmeyen bazı sakıncalı durumlarla da yüz yüze kalabilmektedirler. Bu bağlamda gençlerin ve özellikle üniversite öğrencilerinin neden ve hangi amaçlarla, hangi gereksinimlerin karşılanması amacıyla sosyal ağ sitelerini kullandığı sorusu akla gelmektedir. Ayrıca sosyal ağ sitelerinin farklı değişkenler (akademik başarı, motivasyon, iletişim, sosyal etkileşim, bilgisayar öz yeterliği vb.) üzerinde yarattığı etki, bireylerin sosyal ağ sitelerini ne amaçla ve nasıl kullandığına bağlı olarak değişebilmektedir. Bu sebepten ötürü; sosyal ağ sitelerinin kullanım amaçları ve bilgisayar öz yeterliği değişkeni üzerinde yarattığı etkinin belirlenmesi önem arz etmektedir.

Araştırmanın Amacı: Bu çalışmanın genel amacı Bilgisayar ve Öğretim Teknolojileri Eğitimi Bölümü (BÖTE) öğrencilerinin sosyal ağ kullanma amacı ile bilgisayar öz yeterlikleri arasındaki ilişkiyi belirlemektir. Genel amaca ulaşabilmek için ise betimsel veri analizlerine ek olarak, araştırmaya katılan öğrencilerin bilgisayar öz yeterliklerinin ve sosyal ağ kullanım amaçlarının demografik özelliklerine göre farklılık gösterip göstermediği ile bilgisayar öz yeterlikleri ve sosyal ağ kullanım amaçları arasında ilişki olup olmadığı araştırılmıştır.

Araştırmanın Yöntemi: Çalışma grubunun evrenini, 2013-2014 Eğitim-Öğretim yılında ülkenin doğu bölgesinde bulunan bir üniversitenin Bilgisayar ve Öğretim Teknolojileri Eğitimi bölümünde öğrenim gören öğrenciler oluşturmaktadır. Çalışma grubunun örneklemini ise Bilgisayar ve Öğretim Teknolojileri Eğitimi 2, 3 ve 4.sınıf toplam 189 öğrenci oluşturmaktadır. Katılımcıların cinsiyet, sınıf, mezun oldukları okul türleri, yaşadıkları yer vb. gibi değişkenlere göre demografik bilgileri alınmıştır. Araştırmada betimsel ve ilişkisel tarama modeli kullanılmıştır. Araştırmanın verileri araştırmacılar tarafından geliştirilen Demografik bilgiler anketi, Bilgisayar öz yeterlik inancı ölçeği (Şensoy, 2004) ve Sosyal ağ kullanım amacı belirleme ölçeği kullanılmıştır(Karal ve Kokoç, 2010). Ölçeklerin sırası ile Cronbach α iç tutarlılık katsayıları 0.89 ve 0.83 tür. 16 maddelik bilgisayar öz yeterlik inancı ölçeğinde

"Bilgisayar benim için fazlasıyla karışık bir makinedir" maddesi anket uygulanan kişilerin gerek Böte öğrencileri olmaları gerekse ölçeğin oluşturulduğu 2004 tarihinden bu yana bilgisayarların artık karmaşık makine olmaktan çıkma durumuna gelmesi sebeplerinden dolayı anketten çıkarılmış ve 15 madde ile araştırma yapılmıştır. Anketler çevrim içi ortamda uygulanmıştır. Toplanan veriler İstatistiksel veri analizi programı ile analiz edilmiştir.

Araştırmanın bulguları: Araştırmanın bulgularına göre; katılımcıların bilgisayar öz yeterlik inancı araştırmaya katılan kişilerin bilgisayar öz yeterliği anketinden aldıkları puanların ortalaması hesaplanarak bulunmuştur. Bu sonuç kararsızım seçeneği olan 3 değerine yakın düştüğü için Böte bölümü öğrencilerinin bilgisayar öz yeterlik inancı "orta" düzeydedir denilebilir. Katılımcıların bilgisayar öz yeterlikleri cinsiyet, sınıf, okul türü,kaldıkları yer,yerleşim türleri,aile gelir düzeyi,aile birey sayısı,yaşadıkları bölge,anne eğitim durumu,anne tutumu,baba eğitim durumu,baba tutumu gibi değişkenlere göre incelenmiş ve önemli farklılık görülmemiştir. Sosyal ağ kullanım amacı ise katılımcıların cinsiyet, sınıf, okul türü,yerleşim türleri,anne eğitim durumu,baba eğitim durumu,anne tutumu ve baba tutumuna göre farklılık gösterirken; yaşadıkları bölge,kaldıkları yer,aile birey sayısı,aile gelir düzeyine göre önemli bir fark göstermediği görülmüştür.Bilgisayar öz yeterliği ve sosyal ağ kullanım amacı arasındaki ilişkide ise anlamlı bir faklılık bulunmamıştır.

Araştırmanın Sonuçları ve Önerileri: Araştırmada katılımcıların bilgisayar öz yeterlik inançları ile demografik bilgileri arasındaki ilişkiye bakılmış ve aşağıdaki sonuçlara ulaşılmıştır.2.sınıf öğrencilerinin bilgisayar öz yeterlik inançları ortadüzeyde, 3.sınıf öğrencilerinin orta düzeyde ve 4.sınıf öğrencilerinin de ortadüzeyde olarak saptanmış olup aralarında anlamlı bir ilişki bulunmamıştır. Katılımcıların cinsiyet değişkenine göre bilgisayar öz yeterlik düzeyleri incelenmiş ve erkeklerin bilgisayar öz yeterliği orta düzey çıkarken, bayanların ki orta düzey olarak bulunmuştur. Katılımcıların bilgisayar öz yeterlik inanç düzeyleri diğer demografik bilgilere göre de incelenmiş ve aralarında anlamlı bir ilişkiye ulaşılmamıştır. Araştırmada katılımcıların sosyal ağ kullanım amacı ile demografik özellikleri arasındaki ilişkiye bakılmış ve aşağıdaki sonuçlara ulaşılmıştır. "Yeni insanlarla tanışmak, yeni arkadaşlıklar kurmak için kullanıyorum","Diğer insanlar tarafından tanınmak amacıyla kullanıyorum" ,"Okul proje/ödevlerimle ilgili araştırma yapmak için kullanıyorum" ve "İlgimi çeken gruplara katılmak için kullanıyorum" ile "cinsiyet" değişkeni arasında anlamlı bir fark bulunmuştur."Kendime özgü alan(profil, kişisel sayfa…) yaratma imkanı sunduğu için kullanıyorum ve "Beğendiğim nesneleri (video,resim,not…) paylaşmak için kullanıyorum" ile "sınıf" değişkeni arasında anlamlı bir fark olup bu farkın 2. ve 4. Sınıf öğrencileri arasında olduğu görülmüştür. "Okul proje/ödevlerimle ilgili araştırma yapmak için kullanıyorum" ile "mezun olunan okul türü" ve "yerleşim türü" değişkenleri arasında anlamlı bir fark olduğu ortaya çıkmıştır. "Eğitim amaçlı grupları ve etkinlikleri incelemek amacıyla kullanıyorum" ile "anne eğitim düzeyi" arasında anlamlı bir fark bulunmuştur."Yeni insanlarla tanışmak, yeni arkadaşlıklar kurmak için kullanıyorum" , "İlgilendiğim insanların ve arkadaşlarımın yaşamlarını incelemek amacıyla kullanıyorum" ve "Eğitim amaçlı grupları ve etkinlikleri incelemek amacıyla kullanıyorum" ile "anne

tutumu" arasında anlamlı bir fark olduğu bulunmuştur. "İlgilendiğim insanların ve arkadaşlarımın yaşamlarını incelemek amacıyla kullanıyorum" ile "anne tutumu" değişkeni arasındaki anlamlı farkın Otoriter tutum-Koruyucu tutum ve Otoriter tutum-Demokratik tutum değişkenleri arasında olduğu gözlemlenmiştir. "Okul proje/ödevlerimle ilgili araştırma yapmak için kullanıyorum", "Eski arkadaşlarımla tekrar iletişime geçmek için kullanıyorum" ve "Eğitim amaçlı grupları ve etkinlikleri incelemek amacıyla kullanıyorum" ile "baba tutumu" arasında anlamlı bir fark olduğu ortaya çıkmıştır. Bu farklılığın "Okul proje/ödevlerimle ilgili araştırma yapmak için kullanıyorum" da Diğer-Koruyucu tutum ve Diğer-Otoriter tutum değişkenleri arasında, "Eğitim amaçlı grupları ve etkinlikleri incelemek amacıyla kullanıyorum" da ise Diğer-Koruyucu tutum değişkeni arasında olduğu gözlemlenmiştir. Bölge, kalınan yer, aile birey sayısı aile gelir düzeyi ve baba eğitim düzeyi ile sosyal ağ kullanım amacı arasında ise anlamlı bir fark bulunmamıştır. Böte öğrencilerinin sosyal ağ kullanım amacı ile bilgisayar öz yeterliği arasında ise güçlü bir ilişki bulunamamıştır. Bu sonuçtan yola çıkarak bilgisayar öz yeterlik düzeyinin sosyal ağı kullanım amacını etkilemediği savunulabilir.

Anahtar Sözcükler: Bilişim teknolojileri, Öz yeterlik, Sosyal medya