

Investigating preservice preschool teachers' attitudes to internet use

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Abstract

Nowadays, the Internet is widely known to be the most effective and rapid web tool to access the knowledge away from traditional classroom instruction due to recent developments in telecommunications and Internet technology. Therefore, integration of these technologies with educational programmes is inevitable in order to increase the success and internalise knowledge. The aim of the study is to acquire in-depth knowledge about Turkish prospective preschool teachers' attitudes regarding their Internet use. For this purpose, the "Internet Use Attitude Scale (IUAS)" was given to 234 prospective preschool teachers. The data obtained by the Scale used in the study was analysed through the SPSS program package. The Independent t-test was used to test whether there is a significant correlation between pre-service teachers' responses, their school types and conditions regarding their Internet access. In addition, One-Way ANOVA was used to test whether there is a significant correlation between student teachers' responses and their Internet use level and the frequency of Internet use. The research established that significant differences can be detected with regard to the participants' school types they attend, their Internet access conditions, their Internet literacy level and frequency of Internet use in most of the dimensions of the IUAS in question. As a final remark, some recommendations were made for researchers and teachers about how to integrate Internet technology.

Key words: Internet access, Internet literacy, Internet use frequency, Internet Use Attitude Scale, and Internet use level.

Introduction

With the increased availability and speed of the Internet come new ways of disseminating interactive multimedia learning modules and possibilities for integrating information and communication technologies into other methods of teaching and learning. Developing computer and Internet use skills is one of the

important priorities in preservice teacher education process (Akkoyunlu 2002). It complies with the philosophy of education today encouraging students to access and use knowledge much more than simply transmitting accumulated knowledge. It is also believed that appropriate use of Internet learning environments, such as a variety of online sources, different formats of information, online communication tools, can both facilitate the students' construction process and enhance their critical thinking and epistemological awareness (Tsai, 2004).

The Internet presents recent teaching methods and shares huge amount of knowledge providing teachers and students with access to various sources (Atav, Akkoyunlu & Sağlam 2006). Therefore, for successfully implementing Internet-based learning environments, teacher educators should first know about student teachers' preferences toward these environments (Lee & Tsai, 2005; Tsai, 2005).

Through Web-Based Instruction (WBI), the mode of teaching and learning process has drastically changed in that lessons are becoming more interactive and students are becoming more independent (Le & Le, 1999), while teachers are spared the burden of repeating their teaching tasks and the communication between teachers and students is more targeted and directed (Boer, 2001).

Implementing educational technology is known to have advantages on learners in three ways; first, it changes students into active and motivated learners, second, it forces teachers to be able to manage varied learning styles in the classroom, third, students become lifelong learners who can access, analyse, and synthesize information from a variety of sources (Anderson & Reed, 1998; Lasorenko, 1997).

Revealing the attitudes of students towards Internet use for different disciplines is important for understanding their attitudes towards Internet use and for determining variables affecting their Internet use attitudes (Altun, 2003).

Attitudes towards Internet use of teachers who are responsible for training individuals to use Internet technology are quite important. First of all, teachers themselves should have positive attitudes towards Internet use in order to help their students develop positive attitudes towards it (Tavşancı & Keser 2002).

Now that more and more information technology (IT) resources are becoming available for support of preservice teachers' Web-based learning, it is also becoming increasingly interesting to map the preservice teachers' attitudes towards their use.

Purpose of study and research questions

This study was carried out in order to acquire in-depth knowledge about Turkish prospective preschool teachers' attitudes regarding their Internet use. The vast majority of research has been focused on Internet use of the pre-service teachers in various disciplines (Asan, 2002; Akpinar et al., 2005; Karaman & Açıkyıldız, 2006; Aydın, 2007; Külekçi, 2009; Açıkalın, 2009; Korkmaz & Tunç, 2010; Kahveci, et al, 2011; Yeşilyurt, 2011; Akin & İskender, 2011), with very limited focus on preschool pre-service teachers' attitudes to Internet use (Kol, 2010). Therefore, further research is

needed to reveal the matter from the preschool pre-service teachers' perspectives and to present the findings as they may provide clues which may enhance the use of Internet in different sociocultural contexts.

The present study explores Turkish preservice teachers' attitudes towards Internet use in the Turkish context in preschool teaching settings. In order to attain this goal, it is necessary to investigate the attitudes of prospective preschool teachers' Internet use from the perspective of enjoyment, anxiety, usefulness and self-efficacy.

To guide this study, the following research questions were generated:

1. Is there any difference between preservice preschool teachers' Internet use attitudes and its dimensions in respect to their school types?
2. Is there any difference between preservice preschool teachers' Internet use attitudes and its dimensions in respect to their Internet access conditions at home/dormitory?
3. Is there any difference between preservice preschool teachers' Internet use attitudes and its dimensions in respect to their Internet literacy level?
4. Is there any difference between preservice preschool teachers' Internet use attitudes and its dimensions in respect to their Internet use frequency?

Method

The survey method which is used to explain events, objects, institutions, groups and various fields (Can, 2010) was used for this particular study.

Participants

The population for this quantitative study consisted of pre-service teachers majoring in preschool teaching and pre-bachelor students studying child development and education at Selcuk University. The sample ($n=234$) included 103 preschool bachelor student teachers, 131 pre-bachelor students of the Child Development and Education Department of Vocational School of Health and Care Services.

During the testing procedure, the participants were informed of the purpose of the study, and that the researcher was interested in revealing their Internet use attitudes from different perspectives in order to make good use of the findings for the preschool teacher education process in the future.

Research instrument

The data required for this study was gathered using the Internet Use Attitude Scale (IUAS), developed by Zhang (2007). It consisted of 40 items, with 10 items describing each of the four Internet attributes. The internal consistency coefficients for the 10 items in each subscale - enjoyment, usefulness, anxiety, and self-efficacy - were .87, .86, .90, and .89 respectively. The alpha coefficient for all of the 40 items was .96, (Zhang, 2007). The data obtained by the scale used in the study was analysed through SPSS program package. The independent t-test was used to test whether there is a significant difference

among enjoyment, usefulness, anxiety, and self-efficacy. The instrument consisted of 40 items using a 4-point Likert-type scale, with Strongly disagree = 1, Disagree = 2, Agree = 3, and Strongly Agree = 4. Among them, 10 items were constructed for each individual subscale. A correlation between the pre-service teachers' responses and their school types and their Internet access conditions was also found. In addition, One-Way ANOVA was used to test whether there is a significant correlation between student teachers' responses and their Internet use level and the frequency of Internet use.

Findings

Table 1. The participants' Internet use attitudes in terms of their school types

Attitudes	Bachelor (n=103)		Pre-bachelor (n=131)		T	P
	\bar{X}	SD	\bar{X}	SD		
Enjoyment	30.84	3.66	29.59	4.63	2.24	0.03*
Usefulness	29.39	4.37	28.65	4.75	1.24	0.22
Anxiety	28.74	3.91	27.25	4.14	2.81	0.01*
Self-efficacy	27.98	3.67	28.02	4.15	0.08	0.94
Total	116.95	13.71	113.50	15.28	1.79	0.08

$P < 0.05$

The mean score of the preschool bachelors was 30.84, compared with the mean score for the preschool pre-bachelor of 29.59. A significant difference was found between the two groups in enjoyment dimension of the scale in question [$t = 2.24, P < 0.03$]. Therefore, the preschool bachelors' Internet use attitude can be said to be higher than the preschool pre-bachelors' Internet use attitudes in the *enjoyment* dimension of the scale.

The mean score of the preschool bachelors was 29.39, compared with the mean score for the preschool pre-bachelor of 28.65. Insignificant difference was found between the two groups in usefulness dimension of the scale in question [$t = 1.24, P < 0.22$]. Therefore, the preschool bachelors and the preschool pre-bachelors can be said to have similar Internet use attitudes in the *usefulness* dimension of the scale.

The mean score of the preschool bachelors was 28.74, compared with the mean score for the preschool pre-bachelor of 27.25. A significant difference was found between the two groups in anxiety dimension of the scale in question [$t = 2.81, P < 0.01$]. Therefore, the preschool bachelors' Internet use attitude is found to be higher than the preschool pre-bachelors' Internet use attitudes in the *anxiety* dimension of the scale.

The mean score of the preschool bachelors was 27.98, compared with the mean score for the preschool pre-bachelor of 28.02. Insignificant difference was found between the two groups in self-efficacy dimension of the scale in question [$t = 0.08, P < 0.94$]. Therefore, preschool bachelors and preschool pre-bachelors can be said to have similar Internet use attitudes in terms of *self-efficacy*.

Table 2. The participants' Internet use attitudes in terms of their Internet access condition at home/dormitory.

Attitudes	Accessible (n=141)		Inaccessible (n=93)		T	P
	\bar{X}	SD	\bar{X}	SD		
Enjoyment	30.66	4.41	29.34	3.93	2.33	0.02*
Usefulness	29.58	4.58	28.04	4.45	2.54	0.01*
Anxiety	28.28	4.37	27.34	3.60	1.72	0.09
Self-efficacy	28.60	4.25	27.09	3.20	2.91	0.01*
Total	117.12	15.35	111.82	13.04	2.74	0.01*

$P < 0.05$

The mean score of the participants who access Internet at home/dormitory was 30.66, compared with the mean score for the participants who do not access Internet 29.34. A significant difference was found between the two groups in the enjoyment aspect of the scale in question [$t = 2.33, P < 0.02$]. Therefore, the preschool pre-service teachers who access Internet at home/dormitory may be said to have higher Internet use attitudes than the preschool pre-service teachers who do not access Internet at home/dormitory with respect to enjoyment.

The mean score of the participants who access Internet at home/dormitory was 29.58, compared with the mean score for the participants who do not access Internet of 28.04. A significant difference existed between the two groups in usefulness dimension of the scale in question [$t = 2.54, P < 0.01$]. Therefore, preschool pre-service teachers who access Internet at home/dormitory have higher Internet use attitudes than the preschool pre-service teachers who do not access Internet at home/dormitory for the usefulness dimension of the scale.

The mean score of the participants who access Internet at home/dormitory was 28.28, compared with the mean score for the participants who do not access Internet at home/dormitory of 27.34. Non-significant difference was found between the two groups in anxiety dimension of the scale in question [$t = 1.72, P < 0.09$]. Therefore, the preschool pre-service teachers who do not access Internet at home/dormitory may be said to have more or less the same anxiety level as the preschool pre-service teachers who access Internet at home/dormitory in anxiety dimension of the scale.

The mean score for the participants who access Internet at home/dormitory was 28.60, compared with the mean score 27.09 for the participants who do not access Internet. A significant difference was found between the two groups in the self-efficacy dimension of the scale in question [$t = 2.91, P < 0.01$]. Therefore, it can be said that preschool pre-service teachers who access Internet at home/dormitory have higher Internet use attitudes than preschool pre-service teachers who do not access Internet at home/dormitory with respect to self-efficacy.

Table 3. The participants' Internet use attitudes in terms of their Internet literacy level

Prior to the survey, the participants' Internet literacy levels were determined by an exam. The participants' literacy levels were marked by points they achieved as following: 50 – 70 as "Lower", 71 – 85 as "Middle", and 86 – 100 as "Upper".

Table 3.1. The participants' Internet literacy level with respect to enjoyment

Level	N	\bar{X}	SD	Upper	Lower	Middle	F	P
Lower	34	26.76	3.29	<0.05				
Middle	112	29.75	3.66		<0.05		22.29	<0.05
Upper	88	31.93	4.44			<0.05		

The mean score for the participants with a lower literacy level was 26.76, compared with the mean score for the participants having an upper literacy level of 31.93. Therefore, a significant difference existed between the two groups in the dimension of enjoyment of the scale in question [$F = 22.29 (0.00)$, $P < 0.05$].

The mean score of the participants having a middle literacy level was 29.75, compared with the mean score for those having a lower literacy level of 26.76. Therefore, a significant difference existed between the two groups in the dimension of enjoyment of the scale in question [$F = 22.29 (0.00)$, $P < 0.05$].

The mean score of the participants in the upper literacy level was 31.93, compared with the mean score for the participants having a middle literacy level of 29.75. Therefore, a significant difference existed between the two groups in dimension of enjoyment of the scale in question [$F = 22.29 (0.00)$, $P < 0.05$].

Table 3.2. The participants' Internet literacy level for the dimension of usefulness

Groups	N	\bar{X}	SD	Upper	Lower	Middle	F	P
Lower	34	25.94	3.70	<0.05				
Middle	112	28.71	4.29		<0.05		13.59	<0.05
Upper	88	30.46	4.65			<0.05		

The mean score for the participants in the lower literacy level was 25.94, compared with the mean score for the participants in the upper literacy level of 30.46. Therefore, a significant difference existed between the two groups for the dimension of usefulness of the scale in question [$F = 13.59 (0.00)$, $P < 0.05$].

The mean score for the participants in the middle literacy level was 28.71, compared with the mean score for the participants in the lower literacy level of 25.94. Therefore, a significant difference existed between the two groups for the dimension of usefulness of the scale in question [$F = 13.59 (0.00)$, $P < 0.05$].

The mean score for the participants in the upper literacy level was 30.46, compared with the mean score for the participants in the middle literacy level of 28.71. Therefore, a significant difference existed between the two groups in the dimension of usefulness of the scale in question [$F = 13.59 (0.00)$, $P < 0.05$].

Table 3.3. The participants' Internet literacy level and the dimension of anxiety

Groups	N	\bar{X}	SD	Upper	Lower	Middle	F	P
Lower	34	25.41	3.55	<0.05				
Middle	112	27.25	3.51		<0.06		18.77	<0.05
Upper	88	29.71	4.26			<0.05		

The mean score for the participants in the lower literacy level was 25.41, compared with the mean score for the participants having upper literacy level of 29.71. Therefore, a significant difference existed between the two groups with respect to anxiety [$F = 18.77 (0.00)$, $P < 0.05$].

The mean score for the participants with a middle literacy level was 27.25, compared with the mean score for the participants with a lower literacy level of 25.41. Therefore, an insignificant difference was found between the two groups in the anxiety dimension of the scale in question [$F = 18.77 (0.00)$, $P > 0.05$].

The mean score for the participants in the upper literacy level was 29.71, compared with the mean score for the participants in the middle literacy level of 27.25. Therefore, a significant difference existed between the two groups in the anxiety dimension of the scale in question [$F = 18.77 (0.00)$, $P < 0.05$].

Table 3.4. The participants' Internet literacy level in the dimension of self-efficacy

Groups	N	\bar{X}	SD	Upper	Lower	Middle	F	P
Lower	34	25.50	3.50	<0.05				
Middle	112	27.50	3.29		<0.05		17.26	<0.05
Upper	88	29.61	4.19			<0.05		

The mean score for the participants in the lower literacy level was 25.50, compared with the mean score for the participants in the upper literacy level of 29.61. Therefore, a significant difference existed between the two groups in the self-efficacy dimension of the scale in question [$F = 17.26 (0.00)$, $P < 0.05$].

The mean score for the participants in the middle literacy level was 27.50, compared with the mean score for the participants in the lower literacy level of 25.50. Therefore, a significant difference existed between the two groups in the self-efficacy dimension of the scale in question [$F = 17.26 (0.00)$, $P < 0.05$].

The mean score for the participants in the upper literacy level was 29.61, compared with the mean score for the participants in the middle literacy level of 27.50. Therefore, a significant difference existed between the two groups in the self-efficacy dimension of the scale in question [$F = 17.26 (0.00)$, $P < 0.05$].

Table 4.1. Participants' Internet use frequency with respect to enjoyment

Frequency	n	\bar{X}	SD	Once a fortnight	Every day	Once a week	F	P
Every day	77	32.62	4.08	<0.05				
Once a week	98	29.90	3.48		<0.05		34.00	<0.05
Once a fortnight	59	27.27	3.79			<0.05		

The mean score for the participants who use the Internet *every day* was 32.62, compared with the mean score for the participants who use the Internet *once a fortnight* 27.27. Therefore, a significant difference was found between the two groups for the enjoyment dimension of the scale in question [$F = 34.00 (0.00), P < 0.05$].

The mean score of the participants using the Internet *once a week* was 29.90, compared with the mean score for the participants who reported using it *every day* 32.62. Therefore, a significant difference was found between the two groups with respect to enjoyment [$F = 34.00 (0.00), P < 0.05$].

The mean score for the participants using the Internet *once a fortnight* was 27.27, compared with the mean score for the participants using it *once a week* 29.90. Therefore, a significant difference was found between the two groups in the enjoyment dimension of the scale in question [$F = 34.00 (0.00), P < 0.05$].

Table 4.2. Participants' frequency of Internet use and the usefulness dimension

Frequency	n	\bar{X}	SD	Once a fortnight	Every day	Once a week	F	P
Every day	77	31.16	4.41	<0.05				
Once a week	98	29.31	3.88		<0.05		32.78	<0.05
Once a fortnight	59	25.52	3.87			<0.05		

The mean score for the participants who reported using the Internet *every day* was 31.16, compared with the mean score for the participants using it *once a fortnight* 25.52. Therefore, a significant difference was found between the two groups in the dimension of usefulness of the scale in question [$F = 32.78 (0.00), P < 0.05$].

The mean score for the participants using the Internet *once a week* was 29.31, compared with the mean score for the participants using it *every day* 31.16. Therefore, a significant difference was found between the two groups in the dimension of usefulness of the scale in question [$F = 32.78 (0.00), P < 0.05$].

The mean score for the participants who reported using the Internet *once a fortnight* was 25.52, compared with the mean score for the participants using it *once a week* 29.31. Therefore, a significant difference was found between the two groups in dimension of usefulness of the scale in question [$F = 32.78 (0.00), P < 0.05$].

Table 4.3. Participants' Internet use frequency with respect to anxiety

Frequency	n	\bar{X}	SD	Once a fortnight	Every day	Once a week	F	p
Every day	77	29.93	4.35	<0.05				
Once a week	98	27.57	3.48		<0.05		20.14	<0.05
Once a fortnight	59	25.83	3.52			<0.05		

The mean score for the participants using the Internet *every day* was 29.93, compared with the mean score for the participants using it *once a fortnight* 25.83. Therefore, a significant difference was found between the two groups with respect to anxiety [$F = 20.14 (0.00)$, $P < 0.05$].

The mean score for the participants using the Internet *once a week* was 27.57, compared with the mean score for the participants using the Internet *every day* 29.93. Therefore, a significant difference was found between the two groups with respect to anxiety for the scale in question [$F = 20.14 (0.00)$, $P < 0.05$].

The mean score for the participants using the Internet *once a fortnight* was 25.83, compared with the mean score for the participants using it *once a week* 27.57. Therefore, a significant difference was found between the two groups with respect to anxiety for the scale in question [$F = 20.14 (0.00)$, $P < 0.05$].

Table 4.4. Participants' frequency of Internet use and self-efficacy

Frequency	n	\bar{X}	SD	Once a fortnight	Every day	Once a week	F	p
Every day	77	29.79	4.49	<0.05				
Once a week	98	27.76	3.05		<0.05		17.40	<0.05
Once a fortnight	59	26.06	3.47			<0.05		

The mean score for the participants who reported using the Internet *every day* was 29.79, compared with the mean score for the participants using it *once a fortnight* 25.83. Therefore, a significant difference was found between the two groups with respect to self-efficacy for the scale in question [$F = 17.40 (0.00)$, $P < 0.05$].

The mean score for the participants using the Internet *once a week* was 27.76, compared with the mean score for participants who reported using it *every day* 29.79. Therefore, a significant difference was found between the two groups with respect to self-efficacy for the scale in question [$F = 17.40 (0.00)$, $P < 0.05$].

The mean score for the participants using the Internet *once a fortnight* was 26.06, compared with a mean score for the participants using the Internet *once a week* 27.76. Therefore, a significant difference was found between the two groups with respect to self-efficacy of the scale in question [$F = 17.40 (0.00)$, $P < 0.05$].

Discussion and conclusion

The findings established significant differences between variables enjoyment and anxiety while insignificant differences were found between those participants enrolled in different programmes, e.g. bachelor and pre-bachelor of the University, for the variables usefulness and self-efficacy of the scale mentioned. The attitudes of the participants significantly vary for some aspects of the questionnaire depending on the programme they attended. This finding coincides with the findings of Can (2010) and Asan (2002) who both found significant differences among/between the participants attending different departments of the faculty. The findings may lead us to the explanation that the atmosphere in which the participants are involved could affect them more than the types of schools they attended. In other words, regardless of the programme the participants attend, they are affected by the particular aspects of the scale rather than by the duration of the programme they attended, bachelor or pre-bachelor. Furthermore, significant differences were observed between participants coming from the Erzincan Faculty of Education and Vocational High School of Mercan in the aspects of usefulness, communication and interaction except for anxiety (Yıldırım & Bahar, 2008).

The research in question revealed that there is a significant difference between the participants who can access the Internet at home/dormitory and those who cannot for the aspects of enjoyment, usefulness, and self-efficacy except for the anxiety dimension of the scale. This is supported by the findings that there is a significant difference between participants who have computer access and those who do not (Kol, 2010). In addition to this, the findings prove that there is a significant difference between the participants who have Internet access and those who do not in that the participants who have Internet access have more positive attitudes to Internet and computer use (Köse, Savran Gencer, Gezer, 2007). As for the anxiety dimension of the scale, preschool preservice teachers who do not have Internet access at home do not seem to be more anxious about Internet use than those participants who have Internet at home since one can easily access the Internet anywhere (cinema, cafe, school etc.) as Turkey has developed the infrastructure of WEB system.

The participants' Internet literacy levels are marked as upper, middle and lower levels defined on the basis of quizzes applied during the training and compared to the aspects of enjoyment, usefulness, anxiety and self-efficacy. According to the results of the ANOVA, there is a significant difference between/among upper, middle and lower level participants with regard to enjoyment, usefulness and self-efficacy and upper-middle and upper-lower levels for the anxiety dimension of the scale. Significant differences were also found between/among participants with different Internet literacy levels - those who have upper Internet literacy level against those who do not have ($F_2; 290 = 6.608, p < .05$), (Kol, 2010). Insignificant differences were found only for the participants who have middle-lower Internet literacy levels with regard to anxiety.

The results also revealed significant differences in the participants' Internet use frequency levels (every day, once a week, and once a fortnight) with respect to enjoyment, usefulness, anxiety and self-efficacy dimensions of the scale.

The study established that there are also significant differences between frequency of computer usage, computer experience and attitudes toward computer by prospective class complementary to the study conducted by Kutluca (2011), who found out that prospective teachers who used computers more frequently and had more computer experience had more positive attitudes towards computers than the participants who used computers less frequently and had less computer experience. Contrary to this study, using the Internet more frequently (addiction) also may contribute to anxiety and stress. Accordingly, those who suffer from anxiety and stress may often have a great deal of trouble communicating and interacting with others in a healthy, positive, and meaningful way (Egger & Rauterberg, 1996; Yu, 2001). Akin and İskender (2011) also support the claim that the more addictive to the Internet a student is, the more stress and anxiety he/she is experiencing.

Another study revealed significant differences between/among the participants who used Internet every day to once a month for those participants who used the Internet more frequently ($F_3; 289 = 15.408, p < .05$), (Kol, 2011), which is also consistent with the results of previous studies (Tsitouridou and Vryzas, 2003).

Before making generalizations regarding the present study, it is necessary to mention the scope of the study. The study itself is limited to the sample (the 2010 academic year and the IUAS), and can also be considered a pioneering study exploring preschool teachers' views regarding the Internet. Since pre-service teachers' Internet involvement is becoming more present at all levels of education, it is necessary to recommend that educational researchers are encouraged to conduct more research about preschool teachers' views, attitudes and usages regarding their Internet involvement as an inter and cross-cultural base for obtaining a wider picture.

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Istraživanje stavova studenata odgojiteljskog studija o uporabi interneta

Sažetak

U današnje vrijeme opće je poznato da je Internet najučinkovitiji i vrlo brz mrežni alat za pristup znanju na način drugačiji od tradicionalne učioničke nastave, zahvaljujući suvremenim dostignućima u telekomunikacijama i tehnologiji Interneta. Zbog toga je neizbjegno integrirati tu tehnologiju u obrazovne programe i tako povećati uspjeh u primjeni znanja. Cilj studije je steći cijelovito znanje o stavovima budućih odgojitelja djece predškolske dobi u Turskoj o uporabi Interneta. U tu svrhu je 234 ispitanika, budućih odgojitelja djece predškolske dobi, dobilo "Skalu stavova o uporabi Interneta" / "Internet Use Attitude Scale (IUAS)". Podatci prikupljeni uporabom te Skale analizirani su uporabom SPSS programskog paketa. Uporabljen je Nezavisni t-test da bi se ustanovalo postoji li značajna korelacija između stavova budućih odgojitelja s obzirom na vrstu škole i uvjeta dostupnosti pristupa Internetu. Uz to je korištena i jednosmjerna ANOVA da bi se ustanovalo postoji li značajna korelacija među odgovorima ispitanika i njihovoj razini i učestalosti uporabe Interneta. Istraživanjem je ustavljeno da postoji značajna razlika s obzirom na vrstu škole koju ispitanik polazi, uvjetima dostupnosti pristupa Internetu, razini internetske pismenosti i učestalosti uporabe Interneta u većini dimenzija navedene IUA skale. Kao posljednji naputak, istraživačima i nastavnicima su dane neke preporuke o načinima integracije internetske tehnologije.

Ključne riječi: pristup Internetu, internetska pismenost, učestalost uporabe Interneta, Skala stavova uporabe Interneta, razina uporabe Interneta.

Uvod

S povećanom dostupnošću i povećanjem brzine Interneta javljaju se novi načini diseminacije interaktivnih multimedijalnih modula za poučavanje kao i nove mogućnosti integracije informacijskih i komunikacijskih tehnologija u druge metode učenja i poučavanja. Važni prioriteti u procesu obrazovanja budućih nastavnika su i razvoj računalnih vještina, kao i vještina uporabe Interneta (Akkoyunlu 2002).

To je u skladu s današnjom filozofijom obrazovanja koja potiče studente da znanje koriste i da mu pristupaju na višoj razini od čistog prenošenja akumuliranog znanja. Također se vjeruje da prikladna uporaba okružja za poučavanje na Internetu, kao što su različiti mrežni izvori, različiti formati informacija, alati za mrežnu komunikaciju, kod studenata može potaknuti proces stvaranja i unaprijediti sposobnost kritičkog mišljenja i epistemološke osviještenosti (Tsai, 2004).

Internet predstavlja suvremene metode poučavanja i dijeli ogromne količine znanja pružajući nastavnicima i studentima pristup raznolikim izvorima informacija (Atav, Akkoyunlu & Sağlam 2006). Stoga, za uspješnu implementaciju okružja za poučavanje temeljenog na Internetu, osobe koje obrazuju buduće nastavnike prvenstveno bi trebale znati njihove stavove prema tim i takvim sustavima (Lee & Tsai, 2005; Tsai, 2005).

Provodenjem nastave temeljene na mreži (tzv. Web-Based Instruction - WBI), model učenja i poučavanja se drastično promijenio na način da nastavni sadržaji postaju sve interaktivniji, a studenti postaju sve samostalniji (Le & Le, 1999), dok se nastavnici oslobođaju tereta ponavljanja svojih nastavnih zadataka, a komunikacija između nastavnika i studenata postaje ciljanija i usmjerena (Boer, 2001).

Poznato je da uključivanje edukacijske tehnologije ima pozitivne učinke na subjekte poučavanja na tri načina; prvo, studente pretvara u aktivne i motivirane učenike, drugo, prisiljava nastavnika da prihvati različite stilove učenja, treće, studenti postaju cjeloživotni učenici koji mogu pristupiti informacijama, analizirati ih i sintetizirati koristeći raznolike izvore (Anderson & Reed, 1998; Lasorenko, 1997).

Otkrivanje stavova studenata prema uporabi Interneta za različite discipline bitno je kako bi se razumjeli njihovi stavovi prema uporabi Interneta i za određivanje varijabli koje utječu na njihove stavove o uporabi Interneta (Altun, 2003).

Stavovi prema uporabi Interneta koje imaju nastavnici odgovorni za obučavanje pojedinaca o tome kako koristiti internetsku tehnologiju prilično su bitni. Prvenstveno bi sami nastavnici trebali imati pozitivan stav prema korištenju Interneta kako bi mogli pomoći svojim studentima da razviju jednak odnos prema navedenom (Tavşancıl & Keser 2002).

S obzirom na sve veću dostupnost informacijskih tehnologija koje budućim nastavnicima omogućavaju učenje, povećava se zanimanje za bilježenjem njihovih stavova prema uporabi te tehnologije.

Svrha istraživanja i istraživačka pitanja

Ova studija je provedena u svrhu stjecanja šireg znanja o stavovima prema uporabi Interneta među turskim studentima studija za izobrazbu odgojitelja djece predškolske dobi. Glavnina istraživanja bila je usmjerena na načine kako budući nastavnici koriste Internet u različitim disciplinama (Asan, 2002; Akpinar et al., 2005; Karaman & Açıkyıldız, 2006; Aydin, 2007; Külekçi, 2009; Açıkalın, 2009; Korkmaz & Tunç, 2010; Kahveci, et al., 2011; Yeşilyurt, 2011; Akın & İskender, 2011), usko ograničeno na stavove o uporabi Interneta budućih odgojitelja djece predškolske dobi (Kol, 2010).

Stoga su potrebna daljnja istraživanja kako bi se prikazala situacija iz perspektive budućih odgojitelja, što bi moglo pružiti odgovore koji bi mogli unaprijediti uporabu Interneta s obzirom na različiti sociokulturalni kontekst.

Ova studija istražuje stavove turskih studenata odgojiteljskog studija o uporabi Interneta s obzirom na turski kontekst obrazovanja odgojitelja djece predškolske dobi. Kako bi se ostvario cilj, istraživanje je obuhvatilo ispitivanje stavova o uporabi Interneta s obzirom na dimenzije - užitak, anksioznost, korisnost i samoučinkovitost.

Kao smjernice istraživanja postavljena su sljedeća pitanja:

1. Postoji li ikakva razlika u stavovima među studentima odgojiteljskog studija prema uporabi Interneta i aspektima uporabe s obzirom na vrstu škole koju pohađaju?
2. Postoji li ikakva razlika u stavovima među studentima odgojiteljskog studija prema uporabi Interneta i aspektima uporabe s obzirom na uvjete pristupa Internetu kod kuće / u studentskom domu?
3. Postoji li ikakva razlika u stavovima među studentima odgojiteljskog studija prema uporabi Interneta i aspektima uporabe s obzirom na razinu njihove internetske pismenosti?
4. Postoji li ikakva razlika u stavovima među studentima odgojiteljskog studija prema uporabi Interneta i aspektima uporabe s obzirom na njihovu učestalost uporabe Interneta?

Metoda

Za ovu je studiju korištena metoda upitnika. Ta metoda se koristi da bi se opisali i objasnili događaji, objekti, institucije, skupine i različita polja (Can, 2010).

Ispitanici

Populacija za ovu kvantitativnu studiju sastojala se od studenata odgojiteljskog studija predškolske djece i studenata dodiplomskog studija koji studiraju dječji razvoj i obrazovanje na Sveučilištu Selcuk. Uzorak ($n=234$) sastojao se od 103 diplomirana studenta dodiplomskog studija, 131 studenta dodiplomskog studija pri Odsjeku za dječji razvoj i obrazovanje Stručne škole za zdravstvene usluge (Child Development and Education Department of Vocational School of Health and Care Services).

Tijekom provedbe istraživanja, pristupnici su bili obaviješteni o svrsi istraživanja, te da istraživače zanimaju njihovi stavovi o uporabi Interneta s različitim stajališta kako bi se rezultati mogli upotrijebiti za dobrobit obrazovanja odgojitelja predškolske djece u budućnosti.

Instrument istraživanja

Podatci za studiju su prikupljeni uporabom "Skale stavova o uporabi Interneta" (Internet Use Attitude Scale - IUAS) koju je razvio Zhang (2007). Sastoji se od ukupno 40 stavaka, gdje 10 stavaka opisuju svako od četiri svojstva Interneta. Unutarnji koeficijenti konzistentnosti za 10 stavki u svakoj podskali – ugoda, korisnost,

anksioznost i samoučinkovitost –bili su redom .87, .86, .90 i .89. Alfa koeficijent za svih 40 stavaka je bio .96, (Zhang, 2007). Podaci prikupljeni navedenom skalom analizirani su uporabom SPSS programskog paketa. Da bi se utvrdilo značajno postojanje ugode, korisnosti, anksioznosti i samo-ucinkovitost, korišten je Nezavisni t-test. Instrument se sastojao od 40 stavaka uporabom Likertove skale s 4 točke sljedećeg značenja: "U potpunosti se ne slažem" = 1, "Ne slažem se" = 2, "Slažem se" = 3, i "U potpunosti se slažem" = 4. Unutar njih, postavljeno je 10 stavaka za svaku pojedinu podskalu. Ustanovljeno je i postojanje korelacije između studentskih odgovora, škola koje polaze, te mogućnosti pristupa Internetu. K tomu je provedena i jednosmjerna ANOVA kako bi se provjerilo postojanje značajne korelacije među studentskim odgovorima i njihove razine i učestalosti uporabe Interneta.

Rezultati

Tablica 1.

Prosječni rezultat za studente diplomskog studija predškolskog odgoja bio je 30,84, dok je za studente dodiplomskog studija predškolskog odgoja 29,59. Među skupinama je ustanovljeno postojanje značajne razlike sa stajališta ugode [$t = 2,24, P < 0,03$]. Stoga su stavovi o uporabi Interneta viši kod studenata diplomskog studija predškolskog odgoja nego kod studenata dodiplomskog studija predškolskog odgoja na našoj skali s aspekta ugode.

Prosječni rezultat za studente diplomskog studija predškolskog odgoja bio je 29,39, dok je za studente dodiplomskog studija predškolskog odgoja 28,65. Što se tiče aspeka korisnosti, ne postoji značajna razlika između dvije skupine ispitanika [$t = 1,24, P < 0,22$]. Zaključujemo da studenti diplomskog i dodiplomskog studija predškolskog odgoja imaju sličan stav prema aspektu korisnosti.

Prosječni rezultat za studente diplomskog studija predškolskog odgoja bio je 28,74, dok je za studente dodiplomskog studija 27,25. Među skupinama je ustanovljeno postojanje značajne razlike sa stajališta anksioznosti [$t = 2,81, P < 0,01$]. Stoga su stavovi o uporabi Interneta viši kod studenata diplomskog studija, nego kod studenata dodiplomskog studija na našoj skali s aspekta anksioznosti.

Prosječni rezultat studenata diplomskog predškolskog odgoja bio je 27,98, dok je za studente dodiplomskog studija predškolskog odgoja 28,02. Što se tiče aspeka samoučinkovitosti, ne postoji značajna razlika između dvije skupine ispitanika [$t = 0,08, P < 0,94$]. Zaključujemo da studenti diplomskog studija predškolskog odgoja i studenti dodiplomskog studija predškolskog odgoja imaju sličan stav prema aspektu samoučinkovitosti.

Tablica 2.

Prosječni rezultat ispitanika koji imaju pristup Internetu od kuće / studentskog doma bio je 30,66, dok je prosječni rezultat ispitanika bez pristupa Internetu 29,34.

Ustanovljena je značajna razlika među tim skupinama na skali s aspekta ugode [$t = 2,33, P < 0,02$]. Stoga za studente predškolskog odgoja s pristupom Internetu od kuće / studentskog doma možemo ustanoviti da imaju pozitivnije stavove prema uporabi Interneta od studenata predškolskog odgoja bez pristupa Internetu od kuće / studentskog doma na našoj skali s aspekta ugode.

Prosječni rezultat ispitanika koji imaju pristup Internetu od kuće / studentskog doma bio je 29,58, dok je prosječni rezultat ispitanika bez pristupa Internetu 28,04. Ustanovljena je značajna razlika među tim skupinama na skali s aspekta korisnosti [$t = 2,54, P < 0,01$]. Stoga za studente predškolskog odgoja s pristupom Internetu od kuće / studentskog doma možemo ustanoviti da imaju pozitivnije stavove prema uporabi Interneta od studenata predškolskog odgoja bez pristupa Internetu od kuće/ studentskog doma na našoj skali s aspekta korisnosti.

Prosječni rezultat ispitanika koji imaju pristup Internetu od kuće/studentskog doma bio je 28,28, dok je prosječni rezultat ispitanika bez pristupa Internetu 27,34. Što se tiče aspeka anksioznosti na našoj skali, ne postoji značajna razlika između dvije skupine ispitanika [$t = 1,72, P < 0,09$]. Zaključujemo da studenti predškolskog odgoja bez pristupa Internetu od kuće/studentskog doma imaju sličan ili jednak stav s aspeka anksioznosti kao i studenti predškolskog odgoja s pristupom Internetu od kuće / studentskog doma.

Prosječni rezultat ispitanika koji imaju pristup Internetu od kuće / studentskog doma bio je 28,60, dok je prosječni rezultat ispitanika bez pristupa Internetu 27,09. Ustanovljena je značajna razlika među tim skupinama na skali s aspekta samoučinkovitosti [$t = 2,91, P < 0,01$]. Stoga za studente predškolskog odgoja s pristupom Internetu od kuće / studentskog doma možemo ustanoviti da imaju pozitivnije stavove prema uporabi Interneta od studenata predškolskog odgoja bez pristupa Internetu od kuće/studentskog doma na našoj skali s aspekta samoučinkovitosti.

Tablica 3. Stavovi ispitanika prema uporabi Interneta s obzirom na razinu njihove internetske pismenosti

Prije samog istraživanja, internetska pismenost ispitanika provjerena je rješavanjem ispita znanja. Pismenost je označena u skladu s ostvarenim bodovima na testu na sljedeći način: 50 – 70 kao "Niska", 71 – 85 kao "Srednja", i 86 – 100 kao "Visoka".

Tablica 3.1.

Prosječan rezultat ispitanika s niskom razinom pismenosti iznosio je 26,76, dok je prosječan rezultat ispitanika s visokom razinom pismenosti bio 31,93. Ustanovljeno je postojanje značajne razlike među skupinama s aspekta ugode [$F = 22,29 (0,00), P < 0,05$].

Prosječan rezultat ispitanika sa srednjom razinom pismenosti iznosio je 29,75, dok je prosječan rezultat ispitanika s niskom razinom pismenosti bio 26,76. Ustanovljeno je postojanje značajne razlike među skupinama s aspekta ugode [$F = 22,29 (0,00), P < 0,05$].

Prosječan rezultat ispitanika s visokom razinom pismenosti iznosio je 31,93, dok je prosječan rezultat ispitanika sa srednjom razinom pismenosti bio 29,75. Ustanovljeno je postojanje značajne razlike među skupinama s aspekta ugode [$F = 22,29 (0,00)$, $P < 0,05$].

Tablica 3.2.

Prosječan rezultat ispitanika s niskom razinom pismenosti iznosio je 25,94, dok je prosječan rezultat ispitanika s visokom razinom pismenosti bio 30,46. Ustanovljeno je postojanje značajne razlike među skupinama s aspekta korisnosti [$F = 13,59 (0,00)$, $P < 0,05$].

Prosječan rezultat ispitanika sa srednjom razinom pismenosti iznosio je 28,71, dok je prosječan rezultat ispitanika s niskom razinom pismenosti bio 25,94. Ustanovljeno je postojanje značajne razlike među skupinama s aspekta korisnosti [$F = 13,59 (0,00)$, $P < 0,05$].

Prosječan rezultat ispitanika s visokom razinom pismenosti iznosio je 30,46, dok je prosječan rezultat ispitanika sa srednjom razinom pismenosti bio 28,71. Ustanovljeno je postojanje značajne razlike među skupinama s aspekta korisnosti [$F = 13,59 (0,00)$, $P < 0,05$].

Tablica 3.3.

Prosječan rezultat ispitanika s niskom razinom pismenosti iznosio je 25,41, dok je prosječan rezultat ispitanika s visokom razinom pismenosti bio 29,71. Ustanovljeno je postojanje značajne razlike među skupinama s aspekta anksioznosti [$F = 18,77 (0,00)$, $P < 0,05$].

Prosječan rezultat ispitanika sa srednjom razinom pismenosti iznosio je 27,25, dok je prosječan rezultat ispitanika s niskom razinom pismenosti bio 25,41. S aspekta anksioznosti među ispitanim skupinama ne postoji značajna razlika [$F = 18,77 (0,00)$, $P > 0,05$].

Prosječan rezultat ispitanika s visokom razinom pismenosti iznosio je 29,71, dok je prosječan rezultat ispitanika sa srednjom razinom pismenosti bio 27,25. Ustanovljeno je postojanje značajne razlike među skupinama s aspekta anksioznosti [$F = 18,77 (0,00)$, $P < 0,05$].

Tablica 3.4.

Prosječan rezultat ispitanika s niskom razinom pismenosti iznosio je 25,50, dok je prosječan rezultat ispitanika s visokom razinom pismenosti bio 29,61. Ustanovljeno je postojanje značajne razlike među skupinama s aspekta samo-učinkovitosti [$F = 17,26 (0,00)$, $P < 0,05$].

Prosječan rezultat ispitanika sa srednjom razinom pismenosti iznosio je 27,50, dok je prosječan rezultat ispitanika s niskom razinom pismenosti bio 25,50. Ustanovljeno je postojanje značajne razlike među skupinama s aspekta samo-učinkovitosti [$F = 17,26 (0,00)$, $P < 0,05$].

Prosječan rezultat ispitanika s visokom razinom pismenosti iznosio je 29,61, dok je prosječan rezultat ispitanika sa srednjom razinom pismenosti bio 27,50. Ustanovljeno je postojanje značajne razlike među skupinama s aspekta samo-učinkovitosti [$F = 17,26 (0,00), P < 0,05$].

Tablica 4. Stavovi ispitanika prema uporabi Interneta s obzirom na učestalost uporabe Interneta

Tablica 4.1.

Prosječni rezultat ispitanika koji se služe Internetom svakodnevno bio je 32,62, dok je prosječan rezultat ispitanika koji se Internetom služe jednom u dva tjedna 27,27. Ustanovljeno je postojanje značajne razlike među skupinama s aspekta ugode [$F = 34,00 (0,00), P < 0,05$].

Prosječni rezultat ispitanika koji se Internetom služe jednom tjedno bio je 29,90, dok je prosječan rezultat ispitanika koji se Internetom služe svakodnevno 32,62. Ustanovljeno je postojanje značajne razlike među skupinama s aspekta ugode [$F = 34,00 (0,00), P < 0,05$].

Prosječan rezultat ispitanika koji se Internetom služe jednom u dva tjedna bio je 27,27, dok je prosječan rezultat ispitanika koji se Internetom služe jednom tjedno 29,90. Ustanovljeno je postojanje značajne razlike među skupinama s aspekta ugode [$F = 34,00 (0,00), P < 0,05$].

Tablica 4.2.

Prosječni rezultat ispitanika koji se služe Internetom svakodnevno bio je 31,16, dok je prosječan rezultat ispitanika koji se Internetom služe jednom u dva tjedna 25,52. Ustanovljeno je postojanje značajne razlike među skupinama s aspekta korisnosti [$F = 32,78 (0,00), P < 0,05$].

Prosječni rezultat ispitanika koji se Internetom služe jednom tjedno bio je 29,31, dok je prosječan rezultat ispitanika koji se Internetom služe svakodnevno 31,16. Ustanovljeno je postojanje značajne razlike među skupinama s aspekta korisnosti [$F = 32,78 (0,00), P < 0,05$].

Prosječan rezultat ispitanika koji se Internetom služe jednom u dva tjedna bio je 25,52, dok je prosječan rezultat ispitanika koji se Internetom služe jednom tjedno 29,31. Ustanovljeno je postojanje značajne razlike među skupinama s aspekta korisnosti [$F = 32,78 (0,00), P < 0,05$].

Tablica 4.3.

Prosječni rezultat ispitanika koji se služe Internetom svakodnevno bio je 29,93, dok je prosječan rezultat ispitanika koji se Internetom služe jednom u dva tjedna 25,83. Ustanovljeno je postojanje značajne razlike među skupinama s aspekta anksioznosti [$F = 20,14 (0,00), P < 0,05$].

Prosječni rezultat ispitanika koji se Internetom služe jednom tjedno bio je 27,57, dok je prosječan rezultat ispitanika koji se Internetom služe svakodnevno 29,93.

Ustanovljeno je postojanje značajne razlike među skupinama s aspekta anksioznosti [$F = 20,14 (0,00)$, $P < 0,05$].

Prosječan rezultat ispitanika koji se Internetom služe jednom u dva tjedna bio je 25,83, dok je prosječan rezultat ispitanika koji se Internetom služe jednom tjedno 27,57. Ustanovljeno je postojanje značajne razlike među skupinama s aspekta anksioznosti [$F = 20,14 (0,00)$, $P < 0,05$].

Tablica 4.4.

Prosječni rezultat ispitanika koji se služe Internetom svakodnevno bio je 29,79, dok je prosječan rezultat ispitanika koji se Internetom služe jednom u dva tjedna 25,83. Ustanovljeno je postojanje značajne razlike među skupinama s aspekta samoučinkovitosti [$F = 17,40 (0,00)$, $P < 0,05$].

Prosječni rezultat ispitanika koji se Internetom služe jednom tjedno bio je 27,76, dok je prosječan rezultat ispitanika koji se Internetom služe svakodnevno 29,79. Ustanovljeno je postojanje značajne razlike među skupinama s aspekta samoučinkovitosti [$F = 17,40 (0,00)$, $P < 0,05$].

Prosječni rezultat ispitanika koji se Internetom služe jednom u dva tjedna bio je 26,06, dok je prosječan rezultat ispitanika koji se Internetom služe jednom tjedno 27,76. Ustanovljeno je postojanje značajne razlike među skupinama s aspekta samoučinkovitosti [$F = 17,40 (0,00)$, $P < 0,05$].

Rasprava i zaključak

Rezultati istraživanja pokazali su postojanje značajne razlike u varijablama ugode i anksioznosti, dok je nepostojanje značajne razlike potvrđeno među ispitanicima koji polaze različite studijske programe, primjerice na diplomskom i dodiplomskom studiju pri Sveučilištu, za varijable korisnosti i samoučinkovitosti. Stavovi ispitanika značajno variraju u nekim aspektima upitnika, ovisno o studijskom programu koji pohađaju. To se slaže s nalazima koje su dobili Can (2010) i Asan (2002), a koji su oboje utvrdili značajne razlike među ispitanicima koji pohađaju različite odsjekе unutar fakulteta. Ti podatci nas mogu navesti na zaključak kako ozračje u kojem se ispitanici nalaze na njihove stavove utječe znatno više od vrste škole koju pohađaju. Drugim riječima, neovisno o programu koji ispitanici pohađaju, na njih veći utjecaj imaju određeni aspekti skale nego dužina trajanja studijskog programa koji pohađaju – diplomski ili dodiplomski. Nadalje, uočene su značajne razlike među sudionicima s Erzincan Faculty and Vocational High School of Mercan s aspekta korisnosti, komunikacijskih mogućnosti i interakcije s izuzećem anksioznosti (Yıldırım & Bahar, 2008).

Istraživanje je otkrilo da postoji značajna razlika među ispitanicima koji imaju pristup Internetu od kuće/studentskog doma i onih koji taj pristup nemaju u aspektima ugode, korisnosti i samoučinkovitosti, a razlike nema u aspektu anksioznosti. To potkrjepljuju nalazi koji govore da postoje značajne razlike među ispitanicima koji imaju pristup računalu i onima koji taj pristup nemaju (Kol, 2010). K tomu, navedeni

rezultati dokazuju da postoji značajna razlika među ispitanicima koji imaju pristup Internetu i onih koji taj pristup nemaju na način da ispitanici s pristupom Internetu imaju pozitivniji stav prema uporabi Interneta i računala (Köse, Savran Gencer, Gezer, 2007). Što se aspekta anksioznosti tiče, studenti predškolskog odgoja koji nemaju pristup Internetu od kuće ne pokazuju veću anksioznosti prema uporabi Interneta od pristupnika koji imaju pristup Internetu od kuće s obzirom na to da je pristup Internetu, zbog toga što Turska ima razvijenu telekomunikacijsku infrastrukturu, moguć s gotovo bilo kojeg mjesta (kino, kafić, škola, itd.).

Stupanj internetske i računalne pismenosti ispitanika označen je kao nizak, srednji ili visok, ovisno o rezultatima ostvarenim temeljem ispita provedenih tijekom pripreme za provođenje istraživanja i ti rezultati su uspoređeni s aspektima ugode, korisnosti, anksioznosti i samoučinkovitosti. Prema rezultatima ANOVA testa, postoji značajna razlika među visokim, srednjim i niskim stupnjem pismenosti s obzirom na ugodu, korisnost i samoučinkovitost te s obzirom na gornju-srednju razinu i gornju-nizu razinu s aspekta anksioznosti. Značajne razlike su ustanovljene između ispitanika različite razine Internetske pismenosti i to između onih s visokom razinom pismenosti nasuprot onih koji takvu razinu nemaju ($F_2; 290 = 6,608, p < ,05$), (Kol, 2010), dok kod srednje-niske razine Internetske pismenosti nije ustanovljena značajna razlika s obzirom na razinu anksioznosti.

Rezultat je također otkrio značajne razlike u razinama učestalosti uporabe Interneta među ispitanicima (svakodnevno, jednom tjedno, jednom u dva tjedna), s obzirom na ugodu, korisnost, anksioznost, i samoučinkovitost. Studija je ustanovila postojanje značajne razlike kod učestalosti uporabe računala, računalnog iskustva i stavova prema računalima u budućem radu, što je na tragu studije koju je proveo Kutluca (2011), koji je ustanovio da budući nastavnici, koji češće rabe računalo te imaju više iskustva s računalima, imaju daleko pozitivniji stav prema računalima od onih koji računala koriste rijeđe i imaju manje iskustva u radu s računalima.

Suprotno tom istaživanju, prečesta uporaba Interneta (sa svojstvima ovisnosti) također može pridonijeti pojavi anksioznosti i stresa. U skladu s tim, osobe koje pate od anksioznosti i stresa učestalo mogu imati problema u komunikaciji i interakciji s drugima na zdrav, pozitivan i smislen način (Egger & Rauterberg, 1996; Yu, 2001). Akin i İskender (2011) se također slažu u mišljenju da što je student više ovisan o Internetu, pokazuje višu razinu anksioznosti i stresa. Drugo je istraživanje otkrilo značajne razlike kod ispitanika koji su Internet koristili u rasponu od jednom dnevno do jednom mjesečno i ispitanika koji su ga koristili češće od toga ($F_3; 289 = 15,408, p < ,05$), (Kol, 2011), što se također podudara s prijašnjim istraživanjima (Tsitouridou and Vryzas, 2003).

Prije uopćavanja glede provedenog istraživanja, potrebno je spomenuti njegov opseg. Samo istraživanje je ograničeno uzorkom (2010. akademska godina i IUAS) i također se može smatrati pionirskim radom na području istraživanja stavova prema Internetu kod odgojitelja predškolske. Zbog toga što su aktivnosti studenata na Internetu sve

uobičajenije na svim razinama obrazovanja, potrebno je preporučiti da se istraživači obrazovnog područja potaknu provoditi više istraživanja o pogledima, stavovima i uporabi računala studenata predškolskog odgoja s obzirom na njihov angažman na Internetu, kao međukulturalnog i kroskulturalnog temelja sa svrhom stjecanja šire slike.

Ovo istraživanje su podržali Znanstveni istraživački projekti Sveučilišta u Konya (BAP).