

The Attitudes of Preschool Teachers and Principals towards Computer Using

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ABSTRACT The purpose of the present study is to determine the attitudes of the preschool teachers and principals towards computer using. The study is conducted with Computer Attitude Scale conducted on 460 preschool teachers and 308 principals who have nursery classes in their schools in Sakarya. Arithmetic means, t-test and one-way analysis of variance were performed in addition to descriptive statistics, Pearson Correlation coefficients were calculated and multiple linear regression analysis was used in the study. Having investigated, it appeared that the attitudes of the teachers and principals towards using computer were higher at the levels of interest and use and they were "lower" at the level of anxiety. It is seen that there are significant differences between the attitudes towards using computer and gender, marital status, age and educational status variables. Gender, educational status and age variables were determined as important predictors about using computer.

INTRODUCTION

The computer and the advanced technologies developing rapidly all over the world have started to be one of the basic elements of the education since the last quarter of the 20th century. With the inevitable use of the information technologies in the first decade of the millennium, the importance and use of the computer technologies in education is increasing with same rate as the technological innovations. The inevitable and rapid change in the technology affects not only the societies and the institutions but also the daily and future life of the individual. To benefit from this technology it is a must that new technologies should be applied to every level of the education (Çakir 2004). In the 21st century, it is cardinal for every nation and society to have educational areas with information technologies, the technology-based education areas so that the qualified generations rise (Akpınar 2005).

In these years, not only in our country, but also worldwide the involvement of the information and communication technologies to the education is inevitably important. This common relation between education and technology, because of its unquestionable benefits in terms of socio-economy, quantity and quality, brings up an important question as equal right to access to the technology. The necessary measures are taken in legal regulation for the applying (Cavalier et al. 1994; Zhang 2000; Beck 2002; Alkan et al. 2003). When these technologies are used effec-

tively, they become widespread supporting the education processes, presenting easing possibilities, developing communication skills, and helping for social skills. Therefore, it is widely accepted that these tools make life easier and in all areas of the education science their primary use become more and more widespread (Lindstrand and Brodin 2004; Blackhursts 2005; Cavkaytar and Diken 2006; Alper and Raharini-ri-ri 2006; Lee and Templeton 2008).

Nowadays, integration of the educational institutions to these new technologies, the easy access to the information impresses the attitudes of the teachers and principals. The computer and technology perceive of the teachers is directly about their information on computers and computer use. Therefore, the teachers' perceive of the technology is important (Asan 2003). According to literature, the attitudes are not the only factor affecting the behaviors; the environmental factors also affect the behaviors. Attitudes are the inclination of the individual which comprises its feelings, thoughts and behaviors on a in a steady manner (Smith 1968). Further, for the effective use of the computers, we should primarily know the teachers' attitudes towards the computer. Knowing the teachers' attitudes towards computer will help make the base regulations and reasonable investments to benefit from the information technologies in the most effective way in the education (Tavsancil and Keser 2001) and the teachers must have the ability to use technologic tools (computers, inter-

net, etc.) effectively (Basol and Çevik 2006; Isman 2008).

The success of any attempt to implement technology in educational programs depends strongly upon the support and attitudes of teachers and school principals. It has been suggested that if teachers and principals believed or perceived proposed computer programs as fulfilling neither their own or their students' needs, they are not likely to attempt to bring technology into their schools and classrooms. Among the factors that affect the successful use of computers in the classroom are teachers' and principals attitudes towards computers (Huang and Liaw 2005). Attitude, in turn, constitutes various dimensions. Some examples of these are perceived usefulness, computer confidence (Rovai and Childress 2002), training (Tsitouridou and Vryzas 2003), gender (Sadik 2006), knowledge about computers (Yuen et al. 1999), anxiety, confidence, liking (Yildirim 2000) and leadership (Titrek and Zafer Günes 2011) Moreover, having searched the literature only, Teo's (2008) research determine the perceptions of preschool teachers' towards technology. However, there is not any research to determine the perceptions of preschool teachers' and school principals' towards technology. Moreover, Birişçi et al. (2009), Agbatogun (2010), Öztürk et al. (2011), Bağcı Kiliç (2011), Bakır (2011), Çapan (2012), Sariçoban (2013). Usually researches are related elementary level teachers' perceptions. However, the quality in education on the innovation and research attempts should aim from the preschool education to the higher education (Sisman and Tasdemir 2008).

To develop positive innovations in education system, teachers and school principals should have positive attitudes using computer in the classrooms and schools. Based on the literature, the anxiety for the computers is one of the most important barriers to develop positive attitudes of teachers. The anxiety for the computer is "the anxiety that people feel when they use computers or when they are faced with possibility of using the computers". The people who are anxious of the computers may choose learning how to use computers or they may escape from using computers (Kotrlik and Smith 1988). The anxiety for the computer and technology is also named as the "cyberfobia". Cyberfobia affects not only the computer learning but also computer teaching abilities of the teachers. It is

believed that the anxiety for the computer is elastic and it can change with the education. The best way to decrease the anxiety level for the computers is to instruct people about the computers. It is only possible for the computer to be used effectively in preschool education with the proper guide of the teachers and school principals. The teacher's attitudes towards computer should be analyzed and the required measures should be taken according to their positivity and negativity levels. This will make the computers' effective use in education possible.

The preschool years are named by the authorities and the doyens of the education as 'the magic years of the society'; since the every development area changes so rapidly and the least knowledge and skill to comply with the society are gained in these years. It is only possible with a qualified education full of rich stimuli in the preschool years for the children to see the limits of their potentials. With their increasing number, nursery classes have to be arranged for the education, and the technological tools, with their consistent changes; should be applied to the classes to be successful in terms of quality and quantity (Çakir and Oktay 2004). The first intuitions to start the education are the preschool institutions. When general development features of the children are analyzed, it was seen that the more the child meet the stimulus the more they improve their information and intelligence level. In today's education perception, technology is indispensable for everyone. The computers are one of the biggest innovations that come to our homes. With the computers integration to the education, there have been arguments for the computer use starting age. Today, instead of the opinion of the computers use in the preschool use are not necessary, which is not the case today, the idea of the computers to be beneficial for the preschool years becomes more widespread. The educators have an important role for the proper and relevant use of the computers in the preschool years. The children can only benefit from the computers with the true guide and leading of the educator; so preschool educators should be well-informed and efficient for the computer use. The present study is important since it questions the attitudes of the preschool teachers and the principals who hold office in schools including nursery classes, towards computer use and how the demographic features affect this. The study tries to

reveal and make suggestions about it. Therefore, the following questions are tried to be answered:

- 1) How are the attitudes of the preschool teachers and principals who hold office in schools including nursery classes towards computer use?
- 2) Is there a significant difference in the computer use of preschool teachers and principals who hold office in schools including nursery classes in different ages, gender, marital status, position for the computer use?
- 3) In which level the age, gender, marital status, education level effect the computer use of the preschool teachers and principals who hold office in schools including nursery classes?

METHODOLOGY

In this section the method of the research, population and sample, gathering the data and data analysis matters are studied. With their suitability to the subject and the purposes, the research is improved with the descriptive and relational survey model.

Sample

The research population was the preschool teachers and the principals who hold office in schools including nursery classes in the Province of Sakarya. Determining the population of the research, the accidental sampling model is used and the survey is conducted on the volunteer teachers and school principals. The sample is comprised of, in total 768 individuals including 460 preschool teachers and 308 principals who had nursery classes in their schools and hold office in the Province of Sakarya in 2013-2014 school years. The 481 of the teachers and principals are women (62.7%) and 287 (37.3%) men. 119 of them at (15.5%) 0-25 age group, 390 of them (46.7%) at 26-35, 165 of them (21.5%) at 36-45, and 125 of them

(16.3%) at 46 and above. 217 participants were single (28.3%), 551 participants were married (71.7%). 41 of the teachers and principals comprising the population were high school graduate (5.3%), 80 of them had two year degree (10.4%), 373 of them graduated from Child Development and Department of Early Childhood

Education (48.6%) and 274 of them (35.7%) graduated from the other licenses.

Data Collection

The study is comprised of the data obtained by appliance of Computer Attitude Scale (CAS-M; Deniz L; 1994). The scale is comprised of 5 point likert scale and 42 articles in three different dimensions. Interest for the computer sub-scale from lower dimensions 12 prepositions, computer anxiety lower dimension from 15 prepositions, education use lower dimension are comprised of 13 prepositions. 2 prepositions (number 22 and 28 adverse articulated prepositions) are significant according to material analysis studies results but they are out of these two dimensions; however they are taken to the scale with the thought that it will contribute to the whole CAS-M. CSA- M's Cronbach Alpha internal consistency indexes are found 0.92 by Deniz (1994). When the lower dimensions are taken into consideration, the interest for computer index 0.86, computer anxiety 0.85, and computer use in education lower dimension internal consistency indexes are taken as 0.81.

In the present research Cronbach Alpha internal consistency index about CAS-M scale was found 0.95. Interest for computer from lower dimensions 0.82, computer anxiety 0.82, and computer use in education lower dimension internal consistency index was taken as 0.85. In this way, it was determined that scales internal consistency indexes are significant and high. In the factor analysis, in the confirmative factor analysis technical the principal component analysis are watched. The total variance explained by the interest lower dimension 89.91 %, the total variance explained by the anxiety lower dimension 89.50 % and total variance explained by the use lower are found 85.38 %. As a result of the factor analysis, it was determined that the every level of the scale is in single dimension in itself.

The 6, 8, 9, 12, 14, 15, 20, 23, 24, 25, 32, 33, 34, 36, 37, 38, 40, 41, 42 number prepositions in the CAS-M are adverse articulated. Therefore, while in the direct articulated prepositions "my thoughts exactly" 5, "I really agree" 4, "I agree" 3, "partially agree" 2, "I do not agree" numbered as 1; in the adverse articulated prepositions, "my thoughts exactly" 1, "I really agree" 2, "I agree" 3, "partially agree" 4, "I do not agree" are numbered as 5. Also, corresponding with the aim of

the study, a five point part added to the scale to determine the demographic features of the participants (gender, age, marital status, position and educational status). In the attitude scale for the computer use, the high point taken from the anxiety dimension shows lower computer anxiety, lower point shows higher computer anxiety.

Data Analysis

The data of the research are analyzed using SPSS 17 package program. The frequency and percentage values are calculated in the analysis of the participants' personal information. In the first sub problem, for the attitudes towards computer use, the arithmetic mean and Standard deviation are calculated. The data, as a result of the One-sample Kolmogorov-Smirnov Test the sample is in normal distribution based on skewness ($m = -1.03$; $f = -1.02$), kurtosis (.81) and Kolmogorow Smirnov (KS) result (.415) is high, the distribution is accepted to be homogenous.

In the second sub problem analysis, between the mean points taken from the dimensions, according to gender, marital status and position variables, it was analyzed with the t-test whether there is a significant difference between the attitudes of the preschool teachers. For the age and educational status one way variance analysis is done; (One-Way ANOVA); in the dimensions in which there is a significant difference, the Tukey-b test is applied to determine where the difference is. The insignificant level for this sub problem is taken as 0.05. In the third sub problem analysis, multilinear regression approach is used to determine how the gender, age, marital status and educational status variables affect the attitudes towards computer use. The significant level for this sub problem is taken as 0.01.

As per Table 1, from the attitudes of the preschool teachers and principals who hold office in schools including nursery classes, the anxiety level have the highest mean value ($\bar{X} =$

65.96). The anxiety level of the users towards the computer use is low. The highest mean after the anxiety dimension is seen in the use dimension ($\bar{X} = 58.24$). The lowest mean value is in the interest dimension ($\bar{X} = 55.50$).

As observed in Table 2, the attitudes of the preschool teachers and the principals who hold office in schools including nursery classes are ultimately positive ($\bar{X} = 4.27$). The positive attitude expressions on which the teachers and the principals agree most are the expression that "Computer use in education increases the success." ($\bar{X} = 4.93$); "the computers increases quality of the education" ($\bar{X} = 4.91$); "the computers interest me so much." ($\bar{X} = 4.90$). The negative expressions on which the teachers and the principals agree most are expressions "To learn the computer use is more necessary for the men than women." ($\bar{X} = 1.24$); "The computer addicted is introverts." ($= 1.87$); and "The computers will lead the humanity to despair." ($\bar{X} = 4.95$).

As Table 3 displays, the attitudes of the preschool teachers and the school principals' towards computer in the dimension level, the man's mean point ($\bar{X} = 53.64$) are lower than woman's mean scores ($\bar{X} = 56.60$). The women's interest for computer use is higher [$t_{(766)} = -7.195$; $p < 0.05$]. In the anxiety dimension, the mean scores of the man ($\bar{X} = 63.98$) are lower than the man's mean scores ($\bar{X} = 67.14$). Men's anxiety for the computer use is higher [$t_{(766)} = -7.801$; $p < 0.05$]. In the use dimension, the average scores of the men's ($\bar{X} = 56.53$) is lower than women's ($\bar{X} = 59.26$). Men's attitudes towards computer use in education are lower than women's [$t_{(766)} = 6.991$; $p < 0.05$]. Therefore, the women's interest and use of the computers in education is in higher level than the men's. It is also known that the men's anxiety level is higher than the women's. As a result, it can interpret that there is significant difference between attitudes towards computer use and gender variable.

Table 4 exhibits that when the attitudes of the preschool teachers and the principals attitudes towards computer use is analyzed, there is no significant difference according to the marital status [$t_{(766)} = .973$; $p > 0.05$]. When the attitudes are analyzed in the anxiety level; the mean points of the single users ($\bar{X} = 66.48$) are higher than the married user's mean scores ($\bar{X} = 65.75$). The anxiety level of the single users is seen to be lower [$t_{(766)} = 1.619$; $p < 0.05$]. When the attitudes towards the use of the computer are ana-

Table 1: The attitudes of the preschool teachers and the principals who hold office in schools including nursery classes

Dimension	N	\bar{X}	SS
Interest	768	55.50	5.709
Anxiety	768	65.96	5.632
Use	768	58.24	5.382

Table 2: The attitudes of the preschool teachers and the principals who hold office in schools including nursery classes

<i>Expression</i>	\bar{X}	SS
1. The computers attract me so much.	4.90	0.304
2. The computer will boost the social and inter social relations.	4.59	0.493
3. Computer use in education will increase the success.	4.93	0.504
4. Everyone should absolutely learn how to use the computers.	4.58	0.493
5. With the popularizing of the computers the social services will be given more steadily.	4.67	0.929
6. Computer use in education will lead teachers to the laziness.	4.69	0.887
7. I think to work with the computers is fun.	4.50	0.902
8. The computers will lead the humanity to the laziness.	4.48	0.809
9. The computer use in education will affect the independent decision making of the students negatively.	4.71	0.869
10. The writings about the computers social use interest me so much.	4.67	0.628
11. I want to be a teacher in a class in which everyone studies with the computers.	4.69	0.979
12. The computers are not close to me.	4.19	1.022
13. It will be useful form my occupation to learn the computers.	4.74	0.869
14. Computer use in education kills the creativity of the students.	4.86	0.476
15. The computers will make the people turn into robots.	4.75	0.970
16. I like to tour the computer fairs.	4.67	0.754
17. Work with the computers is fun.	4.71	0.639
18. The computers increase the quality of the education.	4.91	0.286
19. I want to have my personal computer.	4.78	0.866
20. The popularizing of the computers is harmful for the humanity.	4.70	1.036
21. I want to learn at least one computer language fluently.	4.35	1.192
22. The person who is addicted to the computers are introverts.	1.87	1.011
23. Computer use in education will lead the students to the laziness.	4.30	0.849
24. The computers never attract me.	4.95	0.379
25. The computers make me feel angry.	4.81	0.837
26. Computer use in education should be brought immediately.	4.86	0.394
27. The classes on the computer technology attract me.	4.35	0.898
28. To learn the computer use is more necessary for the men than women.	1.24	0.920
29. There is a big interest for computer use in education.	4.63	0.661
30. I believe in the benefits of the computers.	4.70	0.642
31. I read writings/ magazines on the computers.	4.28	1.000
32. The computers should be away from the schools as much as possible.	4.94	0.498
33. The harm of the computers to the society will be more than their benefits.	5.00	0.051
34. Work with the computers disturbs me.	4.80	0.841
35. The computers should be used in education immediately.	4.65	0.997
36. The computers will lead the humanity to the despair.	4.95	0.337
37. Talking about the computers disturb me.	4.36	0.767
38. The work was fine before the computers; so I do not think that the computers are necessary.	4.81	0.836
39. Computer use in the schools will bring dynamism to our education.	4.50	0.961
40. I never accept a job for which I have to use with the computers.	4.95	0.372
41. The computers are the ultimately boring machines.	4.95	0.498
42. Computer use in the classroom will make the students passive.	4.42	1.046
Total	4.27	0.381

Table 3: The t- test analysis results of the attitudes towards computer use according to the gender variable

<i>Dimension</i>	<i>Gender</i>	<i>N</i>	\bar{X}	SS	<i>t</i>	<i>sd</i>	<i>p</i>
<i>Interest</i>	Man	287	53.64	7.662	-7.195	766	0.000*
	Woman	481	56.60	3.716			
<i>Anxiety</i>	Man	287	63.98	7.994	-7.801	766	0.000*
	Woman	481	67.14	2.978			
<i>Use</i>	Man	287	56.53	7.728	-6.991	766	0.000*
	Woman	481	59.26	2.815			

p < 0.05 *There is a significant differences.

Table 4: The t- test analysis results of the attitudes towards computer use according to marital status variable

<i>Dimension</i>	<i>Marital status</i>	<i>N</i>	\bar{X}	<i>SS</i>	<i>t</i>	<i>sd</i>	<i>p</i>
<i>Interest</i>	Single	217	55.82	4.291	.973	766	0.055
	Married	551	55.37	6.178			
<i>Anxiety</i>	Single	217	66.48	3.401	1.619	766	0.001*
	Married	551	65.75	6.288			
<i>Use</i>	Single	217	58.83	3.547	1.929	766	0.033*
	Married	551	58.00	5.938			

$p < 0.05$ *There is a significant differences.

Table 5: The t-test analysis result of the attitudes towards computer use according to the position variable

<i>Dimension</i>	<i>Position</i>	<i>N</i>	\bar{X}	<i>SS</i>	<i>t</i>	<i>sd</i>	<i>p</i>
<i>Interest</i>	Teacher	460	56.51	3.573	6.163	766	0.000*
	Principals	308	53.98	7.649			
<i>Anxiety</i>	Teacher	460	67.04	2.789	6.699	766	0.000*
	Principals	308	64.34	7.951			
<i>Use</i>	Teacher	460	59.19	2.755	6.154	766	0.000*
	Principals	308	56.81	7.590			

$p < 0.05$ *There is a significant difference.

lyzed, the mean scores of the singles users ($\bar{X}=58.83$) and married users ($\bar{X}=58.00$) are really close to each other. Further, it can be said that the marital status variable is said to affect the attitudes of the users towards computer use in education [$t_{(766)}=1.619$; $p < 0.05$].

Table 5 presents that when the preschool teachers and the school principals attitudes towards computer are analyzed, the mean scores of the teachers ($\bar{X}=56.51$) is seen to be higher than the principals ($\bar{X}=53.98$) and also teacher's interest for the computer using is higher [$t_{(766)}=6.163$; $p < 0.05$]. When the attitudes towards computer use are analyzed in the anxiety level, the mean scores of the principals ($\bar{X}=64.34$) is seen to be lower than the teacher's ($\bar{X}=67.04$). The principals' anxiety for the computer use is higher [$t_{(766)}=6.699$; $p < 0.05$]. When the attitudes towards computer are analyzed in the using dimension, mean scores of the teachers ($\bar{X}=59.19$) are seen to be higher than the principals ($\bar{X}=56.81$). Therefore, teacher's attitudes towards computer use are higher than the principals [$t_{(766)}=6.154$; $p < 0.05$].

Further, it was searched that the participants' attitudes are analyzed in the interest dimension, it can be observed that there is a significant difference according to the age [$F_{(3,764)}=33.404$; $p < 0.05$]. When the Tukey-b results, which are attained to determine the source of the signifi-

cant difference, the mean scores of the 0-25 age group ($\bar{X}=52.43$) and the 46 and above age group ($\bar{X}=53.14$) are close to each other. When the 26-35 age group's mean scores ($\bar{X}=57.23$) and 36-45 age group mean scores ($\bar{X}=55.73$) are analyzed, it can be seen that there is a significant difference in their interest for the computer. As a result, the age affects the participant's attitudes towards computer at the interest significantly. Moreover, when the participants attitudes towards computers are analyzed in the anxiety dimension, it can be seen that it differs according to the age variable significantly [$F_{(3,764)}=26.402$; $p < 0.05$]. When the Tukey-b results, which are attained to determine the source of the significant difference, when the participants attitudes towards computers are analyzed the mean scores of the 0-25 age group ($\bar{X}=64.10$) and the 46 and above age group are close to the each other ($\bar{X}=63.09$). The mean scores of the 26-35 age group ($\bar{X}=67.49$) and 36-45 age group ($\bar{X}=66.13$) are close to each other. According to Tukey-b analysis results (1.4) and (2.3) have similar means but it can be said that the mean scores of this dual groups are different from each other. As a result, the age affects the attitudes of the participants towards computers significantly. Further, when the participants' attitudes towards computers are analyzed in the use dimension, it can be seen that it differs according to the age vari-

able significantly [$F_{(3,764)} = 25.583$; $p < 0.05$]. When the Tukey-b results, which are attained to determine the source of the significant difference, are analyzed, the mean point of the 0-25 age group ($\bar{x} = 57.55$), the mean scores of the 26-35 age group ($\bar{x} = 59.58$) and the mean scores of the 36-45 age group ($\bar{x} = 58.27$) are seen to be close to each other. However, the mean scores of the 46 and above age group towards computer ($\bar{x} = 54.98$) are lower than the other age groups. The age affects the attitudes of the participants in the use level significantly. There is a significant difference between the 0-46 age group and 46 and above group attitudes towards computers.

When the interest dimension of the preschool teachers and the principals are analyzed, it can be seen that it differs significantly according to the educational status [$F_{(3,764)} = 61.287$; $p < 0.05$]. When the Tukey-b results, which are attained to determine the source of the significant difference, are analyzed, the mean points of the interest of the graduate of the Child Development and Department of the Preschool Education ($\bar{x} = 58.02$) are determined to be higher than the other education levels significantly ($p < 0.05$). Consequently, the educational status variable differs in the interest dimension significantly. Moreover, when the anxiety dimension of the preschool teachers and the principals are analyzed, it can be seen that it differs significantly according to the educational status [$F_{(3,764)} = 42.064$; $p < 0.05$]. When the Tukey-b results, which are attained to determine the source of the significant difference, are analyzed, the mean scores of the graduate of the Child Development and Department of the Preschool Education ($\bar{x} = 68.13$) are determined to be higher than the other education levels significantly ($p < 0.05$). Consequently, the educational status variable differs in the anxiety dimension significantly. Further, when the interest dimension of the pre-

school teachers and the principals who hold office in the schools including nursery classes are analyzed, it can be seen that it differs significantly according to the educational status [$F_{(3,764)} = 35.412$; $p < 0.05$]. When the Tukey-b results, which are attained to determine the source of the significant difference, are analyzed, the mean points of the graduate of the Child Development and Department of the Preschool Education ($\bar{x} = 59.53$) and two years degree ($\bar{x} = 60.64$) are close to each other. The mean scores of the high school graduates ($\bar{x} = 54.15$) and other license graduates ($\bar{x} = 56.39$) differ from each other. Consequently, the educational status differs in the use dimension significantly.

The results of the predictions of the attitudes towards computer use according to gender, age and marital status variables are given in the Table 6. When dual and partial correlations are analyzed between interpretative and dependent variables, it was determined that there is positive and low level of relation between gender and computer use ($r = 0.27$). When the other variables are controlled, the correlation between two variables are seen to be $r = 0.34$. It can be seen that there is a negative and low level of relation between education and attitudes towards computer use ($r = -0.120$). When the other variables are controlled, the correlation is calculated as $r = -0.056$. It can be seen that there is a negative and low level of relation between marital status and attitudes towards computer ($r = -0.056$). When the dual variables are controlled, this correlation is seen to be $r = 0.025$. It can be realized that there is a negative and low level of relation between educational status ($r = -0.068$), when the dual variables are controlled, the correlation is seen to be $r = -0.242$. There is a mild and significant relation among the gender, age, marital status and educational status variables and the attitude point of the participants for the computer

Table 6: The results of the interpretation of the attitudes towards computer use according to gender, age and marital status variables

Variable	B	Standard error	Reg. Ind. β	t	p	Zero order	Partial r
Stabile(total p)	130.705	5.901	-	22.149	.000	-	-
Gender	17.293	1.721	.522	10.048	.000	.267	.342
Age	-2.820	.753	-.164	-3.743	.000	-.120	-.134
MaritalStatus	.987	1.405	.028	.702	.483	-.056	.025
EducationalStatus	8.231	1.193	.415	6.901	.000	-.068	.242

$R = 0.360$, $R^2 = 0.130$, $F_{(4,763)} = 28.425$, $p = 0.000$

use ($R=0.360$, $p=0.000$). With the four mentioned variables, total variance explains the % 13 of the attitude for the computer ($R^2=0.130$). According to the standardized regression index (β), the comparative importance order of the interpretative variables on the computer attitudes gender ($\beta=.522$), educational status ($\beta=.415$), age ($\beta=-.164$) and marital status ($\beta=.028$). When t-test results on the insignificant of the regression indexes are analyzed, only the three variable groups of the four independent variables ($p<0.01$) are found to be significant in terms of the statistics. Gender, educational status and age variables are seen to be important predictors on the computer use attitudes. Marital status variable is not that effective. According to the results of regression analysis, the prediction of attitudes towards computer using regarding the equality of regression is given below.

Computer Using Attitudes = $130.705 + 17.293$
 Gender + -2.820 Age + 0.987 Marital Status +
 8.231 Education

DISCUSSION

In this section, in the framework of the questioned sub-problems, depending on the attained findings the results of the study are given. In the scope of the first sub-problem of the research, the attitudes of the teachers and principals towards computer use are analyzed generally. It can be said that the attitudes of the teachers and the principals are in the high level in the interest and use dimension; but in the low level in the anxiety dimension. This result corresponds with the result of the studies of the Erkan (2004), Akkoyunlu and Yilmaz (2005), and Çevik and Baloglu (2007). The popularizing of the computer use and easy access to them may be seen as the cause of this situation. It is observed that when use rates increase, the anxiety for the computer use decreases.

As a second sub-problem of the research, whether there is a difference depending on the gender, age, marital status, position and educational status between the teachers and the principals' attitudes towards computer use. It was found out that there is a significant difference between the attitudes towards computer use and the gender variable. Besides, it can be said that women's interest for the computers and their use of the computer in the education are in higher level than the men. The anxiety level of the

women is lower than men. Despite the result of this study that the attitude towards computer use differs in genders, there are other studies in the literature in which there is no difference between genders. (Arikan 2002; Basol ve Çevik 2006; Birisci, Metin and Demiryürek 2011; Çelik and Bindak 2005; Deniz 2000; Tavşancıl and Keser 2001).

Ekici (2008) found no significant difference between attitudes towards computer use and the marital status in the interest dimension; but in the anxiety and use dimension there is a significant difference. The anxiety rate of the single participants are lower than the married ones, the computer use of the single ones are higher than the married ones. It was concluded that there is a significant difference between attitudes towards computer use and the position variable. The interest of the teachers to the computer and their use of computer in the education are at higher levels than the principals. The anxiety level of the principals is at higher level than the teachers. When the mentioned literature is analyzed, it is possible to meet the studies with the similar results. Moreover; Deniz (2000) conducted a study about attitudes towards computer on the pedagogic formation course teacher candidates. The teacher candidate's attitudes towards computer are seen to be mild and there is no relation between computer use and their ages; it was also found that this ability does not depend on the area that they graduate from and their gender. In addition, Arikan (2002) analyzed the class master's candidate's attitudes towards computer and their anxiety for the computers. In this study Arikan concluded that there is no significant difference between the age of the class masters and their attitudes towards computer. Also, Akkus (2005) analyzed the attitudes and the anxiety level of the vocational high school teacher's and concluded that there is no significant difference for gender, age and seniority for the computer use.

It was determined that the attitude towards computer use differ significantly according to the age variable statistically. In the interest dimension the mean points of the 0-25 age group and 46 and above age group are close to each other. The means of the 26-35 and 36-45 age groups differ from each other. In the anxiety level, 0-25 and 46 and above age group and 26-45 age groups' mean points differ from each other. In the use dimension, the mean points of the

0-46 age group and 46 and above age group differ from each other. In this study, despite result that the attitudes towards computer use does not differ according to the age variable, there are other studies in the literature in which they differ according to the age variable (Deniz 2000; Ekici 2008). It can be thought that, with the lowering of the age of the meeting computers, the attitudes of the younger teachers and principals increase in the positive way and the anxiety level decreases.

As a third and last sub- problem of the research, how the gender, age, marital status and educational status affect the teachers and the principals' attitudes are tried to be determined. According to the Regression analysis results, gender, education status and age variables are important interpretative on the attitudes. Marital status variable is not that much effective. With increasing of the computer use and Access to the computers today, it can be seen in the literature about this study that the attitudes of the new generation teachers and principals change in the positive way; and their anxiety level decreases. Even though there are personal differences, it can be seen with analysis of the study and related analysis that the attitudes towards computer use are mostly about gender, age and educational status.

CONCLUSION

As a result of the study, it was seen that the attitude towards computer use are affected by the many demographical variables. With the easy access to the information technology, the anxiety level of the teachers and the principals who meet the computers more than the past are really low. With the many reformation studies in the education during the last years, there are many studies with the technological groundwork such as Faith Project. With the personal computers of the teachers and the principals and the students' computer and tablet pc, the speed of the technology in the classrooms will be caught.

RECOMMENDATIONS

Based on the results, it can be recommended that technology is a need for the teachers and the principals to meet the computers before starting education and to be experienced about the computers. Thus, the quality and quantity of

the classes in the education faculties, providing them suitable environments for the computer use, applied programs, following technology may be seen as the solutions. Not only the pre occupation but also the occupation time educations are important. The earlier the teachers and the principals meet the technologic tools, the better educated they will be provided these tools should be easily accessible. It should also be provided that the teacher candidates, teachers and the principals should be educated for the other tools in the education Technologies and these tools should be easily accessible. There should be more academic studies consisting of more variables.

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