

## Problematic Internet Usage of ICT Teachers

Semseddin Gunduz

NEU, AKEF, Konya, Turkey

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**ABSTRACT :** *Information and communication technologies (ICT) have affected all area in a society. Human can learn quickly and accurately from the internet. The aim of this study was to investigate what the problematic internet usage of ICT teachers. Therefore, the present study investigated the problematic internet usage, who worked as an ICT teacher in secondary schools in Turkey. The data collection tools of the study are "Personal Information Form" designed by the researcher, and Problematic Internet Usage Scale. Descriptive statistics, t-test, ANOVA and Pearson correlation test were used for the statistical analysis of the data. The sample group of this study comprised of 119 ICT teachers. At the end of the research, it was found that male ICT teachers received higher scores in problematic internet usage scale when compared to the female ICT teachers. Participants who had been serving as an ICT teacher for six years and more received higher scores in problematic internet usage level when compared to the other groups.*

**Keywords:** *ICT teachers, internet, problematic internet usage*

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### I. INTRODUCTION

Developments occurring in information and communication technologies have given individuals new duties and responsibilities. Today, the ability of individuals to use information technologies is not a privilege, it has been indispensability. For Individuals to gain these knowledge and skills, "Information Technologies and Software" classes are given in primary schools in Turkey in the 5th and 6th grades as a mandatory lesson. "Information Technologies Teachers" are needed in primary schools for the delivery of this course. The Higher Education Council in Turkey started Computer Education and Instructional Technologies departments within the education faculties as part of the restructuring the education faculties in 1997. This department educates ICT teachers for primary schools; as a result of four years of undergraduate education it gave its first graduates in 2002. An ICT teacher defined as a person giving computer-related training to students or adults in the educational institution he works, has important roles and responsibilities in the training of computer literate individuals.

Today, all teachers must improve themselves against the developing technology and increasing knowledge. ICT teachers must continuously develop themselves as their subject areas revolves around technology. ICT teachers in Turkey are not only expected to give lessons. Researchers [1] divided the expectations of the environment from ICT teachers into three groups: Management's expectations, expectations of colleagues and expectations of students. Management's expectations are divided into several sub-groups such as installing programs to school computers, repairing school computers, establishing a local network in the premises and preparing a webpage of the school. Preparing course materials comes first among the expectations of colleagues. Expectations of students are reaching to the level to use computers in daily life, gaining the ability to solve small problems they encounter on their own and learning high-level computer skills.

ICT teachers in schools are also assigned as ICT guidance teacher at the same time. Here are some of the duties of ICT guidance teachers:

- Making arrangements for keeping IT-supported classes ready for use and functional
- Carrying out informative activities for the school staff, students and parents on the effective use of IT tools in their courses and their compliance with educational activities
- Taking place in the school webcast team and guiding them in the preparation of the school website, publishing it and keeping it up to date

Information technology is constantly evolving and knowledge and skills students will gain are constantly renewed. This situation brings obligation to the ICT teachers to increase their knowledge. ICT teachers give about 20-25 hours lessons to students in class per week on average and being in contact with students, parents and school staff.

According to the Turkish Statistical Institute data, the internet access rate in households in Turkey was 7% in 2004 and this rate exceeded 60% in 2014. Internet use of individuals was 19% in 2004, this rate rose to 54% in 2014 [2]. The rapid spread of the Internet has brought some problems with it. A study [3] described the problematic internet usage as the deterioration experienced in the lives of individuals due to the internet use of the individuals such as the family and work, the failure in controlling the use the internet is consistently and compulsive use [4]. The problematic Internet use of teachers is expected to impact negatively not only

themselves but also students who are associated with them. The aim of this study was to investigate what the problematic internet usage of IT teachers.

## II. METHODS

The study group of the research was consisted of 60 female and 59 male ICT teachers a total of 119 teachers teaching in Turkey in the fall semester of 2014-2015 academic year. In the study group, 110 of the ICT teachers are in public secondary school; 9 of them are in the private secondary school. In the study group, 24 of the ICT teachers are single; 95 of them are married.

**Table1.** Demographic Characteristics of Study Population

Demographics	Options	n	%
Gender	Female	60	50.4
	Male	59	49.6
Experience in Teaching	0-2 years	29	24.4
	3-5 years	33	27.7
	6 years or more	57	47.9
School Type	Secondary school (public)	110	92.4
	Secondary school (private)	9	7.6

### II.1. Data Collection Tools

**Personal Information Form:** The Personal Information Form was designed by the researcher himself to identify the demographics of the participants, gender, experiences in teaching, and school type. The form contained four items. **Problematic Internet Usage Scale:** This scale consists a total of 33 items under three dimensions as Negative Consequences of the Internet (17 items); Social Benefit/Social Comfort (10 items), and Excessive Usage (6 items) [5]. The scale was graded on a five-point Likert-type scale. The scores to be obtained from the scale range from 33 to 165. High scores from the scale indicate that individual's the internet usage become unhealthy.

### II.2. Data Collection

The research data collection tool, Problematic Internet Usage Scale, and Personal Information Form were organized by bringing together and are reproduced in sufficient numbers. Data collection tools were applied on ICT teachers teaching in the secondary school in November 2014. 119 ICT teachers completed the data collection tool during the implementation process.

### II.3. Data Analysis

Descriptive statistics (mean, standard deviation, minimum and maximum values, etc.) were used for general data relating to problematic internet usage of ICT teachers. Independent samples t test was used to determine whether there are differences between ICT teachers' gender and problematic internet usage levels or not; and the one-way analysis of variance (One-way ANOVA) was performed to determine whether there are differences between the experience in teaching and their problematic internet usage level or not. The Scheffe test was performed to determine the source of the difference resulting from analysis of variance. The Pearson correlation coefficient measures used to describe the linear relationship between problematic internet usage level and its sub dimensions. SPSS 21 program was used for data analysis and level of significance was accepted as 0.05.

## III. FINDINGS

The arithmetic average of male ICT teachers scores obtained from daily internet usage duration is the 4.26. The arithmetic average of female ICT teachers scores obtained from daily internet usage duration is the 3.74.

### III.1. ICT Teachers' Problematic Internet Usage Levels Depending on Gender, and Experience in Teaching

The first research question posed for the study was: "What are ICT teachers' problematic internet usage levels in reference to their demographics?" The second question posed for the study was: "Do ICT teachers' problematic internet usage levels differ significantly depending on gender, and experience in teaching?" In order to find answers to these questions independent sample t test and One-Way ANOVA were conducted. Table 2 presents the distribution of the data obtained from arithmetic means, and standard deviation values and results of the independent sample t test.

**Table2.** The Participants' Problematic Internet Usage Levels by Gender

Scale	Options	N	Mean	Std. D.	t	p
Negative Consequences of the Internet	Female	60	32.05	9.13	-4.10	.01
	Male	59	40.12	12.13		
Social Benefit/Social Comfort	Female	60	19.08	6.31	-6.71	.01

	Male	59	27.51	7.35		
Excessive Usage	Female	60	17.83	4.68	-3.57	.01
	Male	59	20.78	4.31		
Problematic Internet Usage	Female	60	68.97	16.41	-5.84	.01
	Male	59	88.41	19.79		

The arithmetic average of female ICT teachers scores obtained from the scale of problematic Internet use is the 68.97 and the standard deviation is 16.41. The arithmetic average of male ICT teachers scores obtained from the scale of problematic Internet use is the 88.41 and the standard deviation is 19.79. The scores of male ICT teachers taken from the scale of problematic Internet use are higher than that of females. The result of the independent sample t test performed to determine whether the difference between the two groups was statistically significant was 5.84 t values. It is determined that male ICT teachers use more problematic internet than female ICT teachers. In order to find answers to “Do ICT teachers’ problematic internet usage levels differ significantly depending on experience in teaching?” One-Way ANOVA was conducted. Table 3 presents the distribution of the data obtained from arithmetic means, and standard deviation values and results of the analysis.

**Table3.** The Participants’ Problematic Internet Usage Levels by Experience in Teaching

Scale	Options	N	Mean	Std. D.	F	P	Differ
Negative Consequences of the Internet	0-2 years /A)	29	35.28	11.63	2.23	.11	-
	3-5 years (B)	33	33.06	10.37			
	6 years or more (C)	57	38.18	11.65			
Social Benefit/Social Comfort	0-2 years /A)	29	20.28	7.53	6.61	.01	A-C B-C
	3-5 years (B)	33	21.33	6.96			
	6 years or more (C)	57	25.89	8.10			
Excessive Usage	0-2 years /A)	29	17.28	4.39	18.87	.01	A-C B-C
	3-5 years (B)	33	16.88	4.36			
	6 years or more (C)	57	21.72	3.86			
Problematic Internet Usage	0-2 years /A)	29	72.83	19.75	7.47	.01	A-C B-C
	3-5 years (B)	33	71.27	18.63			
	6 years or more (C)	57	85.79	19.88			

The arithmetic average of serving as an ICT teacher for two years or less scores obtained from the scale of problematic Internet use is the 72.83 and the standard deviation is 19.75. The arithmetic average of serving as an ICT teacher for six years or more scores obtained from the scale of problematic Internet use is the 85.79 and the standard deviation is 19.88. One-way ANOVA test was performed to determine whether there are statistically significant differences among the three groups and the F value of the result of the test was 7.47. Scheffé test was performed to determine the difference among which groups and as a result it was determined that ICT teachers teaching for 6 or more years use more problematic Internet use than teachers teaching less.

**III.2. Relationship between the Problematic Internet Usage and Its Sub Dimensions of ICT Teachers**

The correlation analysis was carried out to determine the relationship between the problematic internet use and its sub dimensions of ICT teachers. The results are given in Table 4.

**Table4.** Relationship between Problematic Internet Usage and Its Sub Dimensions of ICT Teachers

	1	2	3	4
1.Negative Consequences of the Internet	-			
2.Social Benefit/Social Comfort	.68**	-		
3.Excessive Usage	.40**	.49**	-	
4. Problematic Internet Usage (Total)	.91**	.88**	.64**	-

n= 119

\*\* Correlation is significant at the 0.01 level.

When the Table 4 is examined it can be seen that there is a significant relationship between the levels of problematic Internet use of ICT teachers and all sub dimensions in a positive way.

**IV. Conclusion**

As a result of the study, it was found in the research that male ICT teachers use problematic internet more than female ICT teachers. It was found that experienced ICT teachers use problematic internet more than inexperienced ICT teachers. In-depth researches can be designed to reveal the reason of them.

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