

## Women and Information Technologies

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### Abstract

The purpose of this research is to document the personal gain of women after using information technologies and to determine how, why and how often they use information technologies, which were designed for men, and which are under men's domination. In the study, after mentioning technology and information technology in general, a literature review will be conducted by examining the studies on women and information technologies. This study, "Information Technologies and Women" examines the relationship between women and information technologies and how it differs from men's relationship to information technologies. The sample is 1,100 people, 550 are men and 550 are women. A questionnaire with 25 questions was applied in interviews. The questionnaire was practiced upon the questions in the survey "2008 Information Technologies Use of Residents" conducted by the Turkey Statistics Institute. The sample was selected homogeneously among the people using computers and the internet at home, work or in internet cafés who are at least high or junior high school graduates. The participant's ages were between 16 and 65. The selection of participants was made according to their work and marital status. The data of questionnaire was uploaded to a computer and analyzed using SPSS software with cross and frequency charts. The data was evaluated under the main titles of: the profiles of the people who took the questionnaire, use of information technologies, access type, rates of use, frequency of use, purpose of use, and personal gains after use.

At the end of the study, the relationship between information technologies and women and its differences from men were successfully documented and subjected to analysis.

**Keywords:** Information Technologies, Internet, social gender, woman

### Introduction

Femininity and masculinity are main categories in human relations. Everywhere and in every culture, people categorize the person encountered as a man or woman. The perceived normal features of masculinity and femininity and how these features affect individuals, their relationships and society in general change according to time and place (1).

The role of men and women in social life, the field in which they exist, and especially the manipulation of the labor force according to social gender is closely related with how this relationship is socially formed. It is a general belief that men and women have a different relationship with technology. This relationship, which is accepted as universal, begins with the birth of a child and becomes a part of his social identity. This relationship that begins in the family with socialization continues through educational institutions and is reinforced by mass media. For instance, a girl plays with a doll and a boy plays with a toy car. A girl has home economics course at school, while a boy has repair and maintenance

course. In ads, while the girl plays with a Barbie, the boy plays in front of a computer. These countless examples reveal that there is a different relation between social gender and technology. While women are considered to be related to the domestic use of technology, men are believed to be the producers of technology (2).

It is a well-known fact that women's opportunities to use recent information technologies are limited compared to men's. Besides, if women use these technologies, they use them in order to do the jobs, which are considered suitable for their feminine roles such as entering data and typing a text. In short, computers are presented as a new model of advanced typewriters for women. In this way, their use of a new technology is restrained. Technologies are not unbiased instruments as they are claimed to be. In contrary, technologies are the instruments that regenerate the dominant social structure and relationships. Women are considered not predisposed nor close to technology. Woman culture and the feminine information produced in this culture are trivialized by dominant sexist ideology. For example, while the subjects of technology history are the contributions of men to the improvement of science and technique, women's relation with these tools and devices is in terms of their domestic work process in daily life. The meaning and usage value women give to these devices is neglected, as well as their original designs and practice. Their genuine designs about cleaning, saving, hiding and protecting are ignored (3). However, the field of information technologies is full of opportunities of self-realization and liberty for women. Information technologies also have the potentials of using them in favor of women. Thus, detecting by whom and for which purposes these recent technologies, (also called new media information and communication technologies or information technologies), are used is important in order to generalize the use of these technologies for women and detect the usage problems and whether there is a gender related difference in usage.

#### **Socialization and Social Gender**

Most human behaviors are learned behaviors. Learning certain things in a certain society happens in a formation called the socialization process. The process of learning humanistic behaviors is called socialization (4).

Socialization is the process of individual's learning the rules, norms, attitudes and behaviors of society, acting in line with these learnings, and gaining a personality and individuality in the society. Socialization begins with the birth of an individual and continues through his or her life. Socialization is a learning process. In this process, there is a learner-teacher interaction. The teacher is society and the learner is the individual who goes through the socialization process. (5)

Identity shows the individual's characteristics, which separate him from other individuals. The questions of who is the individual, what are the characteristics and roles of the individual and what can the individual do are all related to the identity. Identity is the expression of an individual's defining and positioning himself. In other words, it reflects how a person defines and positions himself in his own social world. It is a response related to who he is and where he stands. Sexual identity is an important part of one's self. A person's defining him- or her-self as a woman or a man is the inner personal connotation of femininity and masculinity revealed as personality and behavior. The cultural meanings of sexuality are considered as social gender roles. After the children are labeled as a girl and a boy, they start to learn and acquire the cultural meanings of sexuality. Social gender role is a group of expectations which are expected to be fulfilled by individuals (6).

The concept of social gender is based on the behavior patterns learned in a society and men's and women's social form of self expressions. That is, social gender is a cultural concept. It establishes the distinction between man and woman in terms of roles, behaviors, mental and emotional features. It also establishes the beliefs and expectations about how society should be. Social gender is the sum of the differences that were set socially between man and woman and that can change according to time and cultures. The roles and responsibilities of social gender include an intense learning process that takes place in socialization (7).

A new born baby has a biological sex. It does not have a social sex yet. While growing up, society puts a series of behavioral patterns and rules appropriate for his or her gender in front of the child. Certain socialization factors, especially family, media, peer groups and school, embody these expectations and models and creates environments in which the child can own them. In addition to this, various learning

mechanisms such as conditioning, training, taking someone as a model, and identification, intervene in this process (8).

We learn most of our behaviors and values from social conditionings and examples. Initially, the examples and models acquired from family and the immediate area form future behaviors and attitudes of individuals. Mostly, the man acquires his shape from, his first male model, the father. Similarly the woman gets hers from the mother, the first female model. Like it or not, the attitudes of our fathers and mothers have rocked our identities and they formed both our sexual roles and our perception of the opposite sex. The conceptual and behavioral expectations of the society from man and woman are quite different. According to the generalized results of the past research, men display sexual roles complying mostly with success, power, autonomy, aggression and self-realization while women display sexual roles on supporting, relationship, help, respect and sacrifice. It has been detected that men mostly displayed behaviors about practical and functional subjects (doing a job to finish a work, autonomy and self-protection). On the other hand, women displayed behaviors about the subjects of expression and relationship (sensitivity to others' needs, supporting and dependency) (9).

### **Information Technologies**

New media has begun to develop by adoption of improvements in computer and information processing to communication technologies after 1970s. Therefore, the new media has been called information and communication technologies (10).

Utilization of the computer has increased especially in the last decade of the 20<sup>th</sup> century. This increase occurred throughout the world and by enormous expansion of computer usage arenas. Information Technologies is a field which emerged as a result of the improvements in computer power and design. It includes the technology of computer hardware and software that are used to save, transmit and process data. However, today, Information technologies (IT) is not a field that is limited to configuration of software and installation of systems. With a more contemporary look, information technologies have a number of components such as computer hardware, software, networks, communication technologies, work force trained in the field, procedures, and the Internet, Intranet and communication tools. Information technologies have existed for 50 years and they are of utmost importance today (11).

Information Technology comprises all the technologies, including communication and computers, used in gathering, storing, processing, transmitting the information via computers and putting it into service for users. Information technologies are used for all of the information services that are connected to communication and computer services. It helps us do all kind of work in every part of our life and saves us from much drudgery. It gives us the opportunity to have spare time for ourselves. Information technology is related to all other technologies and, as a result, by being used in many different forms, it provides us with the opportunity of an unlimited impact and improvement. Information technologies enable us to reach the information, which is the raw material of information society, at any time and any place. In addition to this, it acts as an intermediary in producing new information. By the help of these technologies, society is being reshaped (12).

The actions, which take place in a virtual arena, such as corresponding via e-mail, chatting on the MSN, searching information on web sites, e-shopping, playing digital games on-line or off-line, using mobile Messenger, I-pod, etc. have become a natural part of our lives. Information technologies, which are also called the new media, are used and exist in all areas of life: communication between people, commerce, politics, health, career and games etc. (13).

### **Information Technologies And Women**

New information technologies were neither developed by women nor they have been used in favor of women. Women's uses of new information technologies are mostly at the level of passive users and consumers of consumption society. When producing a new technologic appliance, an ideal user is decided. The identity of this ideal user is important. The ideal users of the appliances that are considered to be highly prestigious to use are thought to be men. Using these appliances is believed to be in men's interest and skill area, especially in terms of new information technologies. Therefore, the existing inequalities between man and woman are reinforced in the use of new information appliances. A great deal of research related to the use of information technologies by men and woman claims that these technologies maintain and continue the sexism and power relations between man and woman in daily

life. Women cannot become free from dominant sexist regime because of the problems they encounter in reaching the technology, and because they are technology illiterate, as well as because of the dominant reflection of patriarchal culture in information technologies (14).

Girls and boys are directed in different ways from the beginning of their lives. Family, school and almost all of the social mechanisms, in which girls take place, trivialize women's experience, produce and design practices of technology by repeating that women are not "close" and "predisposed" to technology and they are "away from it" in many ways. Generally speaking, women represent "predisposed to the nature" and "emotional" and men represent "mind" and "technical-scientific". This categorization is a result of regeneration of patriarchal social gender ideology in every part of society. With the development and spread of information technologies, the ethnic, class, regional and gender inequalities in reaching and using these technologies have created the rich and the poor (15).

The socialization formed by new technologies is not unbiased in terms of gender. Girls- women get little support to internalize these new technologies. There are very few female models and experts related to these new technologies. Economic and time related limitations are the cause for women not to connect with these technologies. The expenses of purchasing and operating these technologies become a bigger burden for women's income compared to men's. Besides, women's have a lot of responsibilities at home and in family and this brings about many limitations in their time and schedule. Most of the women rarely have a personal computer. They share computers with their husbands or fathers. The internalization and use of information technologies are limited for women in terms of place and time (16) (17).

The aim of this study, entitled "Information Technologies and Women" is to detect the position of women in possessing information technologies, which have a patriarchal structure, how they reach these technologies, usage rates, frequency and aim, the personal gains of women as a result of using these technologies and the difference in these gains between men and women. In order to fulfill this aim the subjects of socialization, social gender, information technologies and women were dealt with. After that, in the implementation part, the relation of women with information technologies and the differences in these relations compared to men are examined and the findings are analyzed in findings and discussion part.

### **Findings and Discussion**

In the study titled as "Information Technologies and Women" in which the relationship between women and Information technologies are questioned, the subject group has been composed of 1100 people, 550 women and 550 men between the ages of 16-64 and living in Eskisehir. The people in the sampling took a questionnaire of 25 questions by interview method and the following results have been acquired. The questionnaire was prepared upon the questions in the survey "2008 Information Technologies Use of Residents" conducted by Turkey Statistics Institute. The sample was selected homogeneously among the people using computers and the internet at home, work or in internet cafés who are at least high or junior high school graduates and between the ages of 16-65. The data of questionnaire was uploaded to a computer by using SPSS software, and analyzed by using cross and frequency charts. The data was evaluated under the main titles of: the profiles of the people who took the questionnaire (IT possession status, duration of IT use, frequency of use and access type) purpose of the Internet and computer use, the web sites they enter, users' relationship with IT, and personal gains after IT use. Under these titles, the sexual differences were analyzed and some suggestions that can be in favor of women are opened to discussion in line with the results.

According to Chart I, 40.9% of the people who were randomly picked as sampling and took the questionnaire are between the ages of 25-34, 20% of them are between 45-54, 17.3% of them are between 16-24 and 35-44, and 4.5% of them are between the ages of 55-64. The rate of the university or college graduates is 73.6% and 26.4% of them are graduates of high school or equivalent. 60.9% of the people are married and 39.1% of them were single. People have a job with a rate of 84.5 and the rate of unemployed people is 15.5%.

Considering the IT possession, all of the women and men who took the questionnaire have cell phones. Women have DVD-VCD players with a rate of 81% while men have the same products with a rate of 80%. 74% of the women and 69% of the men have digital camera. The rate of the women who have

own desktop computer is 70%; whereas, the rate of men who have one is 80%. The rate of laptop computer possession is 34% for women and 47% for men. Women own a game console with a rate of 0.7% while men own one with a rate of 16%.

When the question of “who bought your personal computer?” was asked, women responded as “I bought it myself” with a rate of 32.7% and men responded same with a rate of 61.8%. Similarly, 30.9% of the women responded as “My spouse or partner bought it” and the rate was 7.3% for men who gave the same response. The responses for the question “Where do you use your computer most?” were, in the first place, “at work” with a rate of 54.5% for women and 50.9% for men, in the second place, “at home” with a rate of 45.5% for women and 49.1% for men. The rate of those who responded as “at the Internet café” was 12.7% for men and 1.8% for women. The responses for the question of “Where do you use the Internet most?” were “at home” with a rate of 50.9% for women and 66% for men. This was followed by “at work” with a rate of 43.6% for women and 34% for men. The rate of those who responded as “at the Internet café” was 13.2% for men and 3.6% for women.

The responses for the question “How long have you been using your computer?” were “for more than one year” with a rate of 96.4% for women and 94.5% for men. When it comes to the frequency of use, the response was “every day” with a rate of 87.3% for women and 90.9% for men, and “once a week” with a rate of 9.1% for both women and men. Women stated that they have learned their computer skills by trial error method with a rate of 50.9% while men have stated it with a rate of 67.3%. The rate of the participant women who have learned her computer skills at an official course is 20% whereas the rate of men is 10.9%.

Similarly, the rate of the people who have learned their computer skills at an adult learning center is 14.5% for women and 9.1% for men. Lastly, the percentage of the women who have received help from a friend or a relative while learning her computer skills is 12.7% and that of men is 10.9%.

#### Chart I

##### The Profiles of The People Who Took the Questionnaire

Profiles	Criteria	Women	Men	TOTAL
Age	16-24	70 12.7%	120 21.8%	190 17.3%
	25-34	220 40%	230 41.8%	450 40.9%
	35-44	110 20%	80 14.5%	190 17.3%
	45-54	140 25.5%	80 14.5%	220 20%
	55-64	10 1.8%	40 7.3%	50 4.5%
	<b>TOTAL</b>	<b>550</b> <b>100%</b>	<b>550</b> <b>100%</b>	<b>1100</b> <b>100%</b>
Education Level	High School	80 13.5%	210 38.2%	290 26.4%
	College-University and above	470 85.5%	340 61.8%	810 73.6%
	<b>TOTAL</b>	<b>550</b> <b>100%</b>	<b>550</b> <b>100%</b>	<b>1100</b> <b>100%</b>
Marital Status	Married	370 67.3%	300 54.5%	670 60.9%
	Single	180 32.7%	250 45.5%	430 39.1%
	<b>TOTAL</b>	<b>550</b> <b>100%</b>	<b>550</b> <b>100%</b>	<b>1100</b> <b>100%</b>

<b>Work Status</b>	Yes	460 <b>83.6%</b>	470 <b>85.5%</b>	<b>930</b> <b>84.5%</b>
	No	90 <b>16.4%</b>	80 <b>14.5%</b>	<b>170</b> <b>15.5%</b>
	<b>TOTAL</b>	<b>550</b> <b>100%</b>	<b>550</b> <b>100%</b>	<b>1100</b> <b>100%</b>

**Chart II****The Purpose of Computer Use**

<b>PURPOSE</b>	<b>Women</b>	<b>PURPOSE</b>	<b>Men</b>
<b>Communication (MSN, e-mail, chat)</b>	430 <b>78.2%</b>	<b>Internet (surfing)</b>	440 <b>79.9%</b>
<b>As a part of your job</b>	400 <b>72.7%</b>	<b>Communication (MSN, e-mail, chat)</b>	420 <b>76.3%</b>
<b>Research</b>	390 <b>71%</b>	<b>Work</b>	340 <b>61.7%</b>
<b>Internet (surfing)</b>	350 <b>63.7%</b>	<b>Playing Games</b>	300 <b>54.4%</b>
<b>Typing</b>	260 <b>47.3%</b>	<b>Research</b>	280 <b>50.9%</b>
<b>Playing games</b>	200 <b>36.4%</b>	<b>Listening to Music</b>	210 <b>38.3%</b>
<b>Listening to Music</b>	150 <b>31%</b>	<b>Watching Movies</b>	160 <b>29.1%</b>
<b>Watching Movies</b>	140 <b>23.7%</b>	<b>Typing</b>	90 <b>16.4%</b>

\*The sum of the columns is not equal to a hundred percent as more than one item can be checked.

According to Chart II, Among the people who took the questionnaire, women defined their purpose of using computer as communication (MSN, e-mail, chat) with the rate of 78.2%, as a part of their job with the rate of 72.2%, doing research with a rate of 71%, surfing on the Internet with the rate of 63.7% and typing with the rate of 47.3%. Men defined their purpose of using computer as surfing on the net with a rate of 79.9%, communication (MSN, e-mail, chat) with a rate of 76.3%, as a part of their job with a rate of 61.7%, playing games with the rate of 54.4% and doing research with 50.9%.

According to Chart III, for the statements of “I don’t share my computer.” and “I cannot take my turn to use computer because of the others at home.” which render the use status of the people who took the questionnaire, women and men said “yes” at the same rate. However, for the statement of “I don’t have time to use computer at home.” they said “yes” with a rate of 17.3% for women and 11.3% for men. As for the possessing the computer at home they said that the computer belongs to them with rate of 36.5% for women and 66% for men. They said “yes” for the statement of “I cannot use the computer at home comfortably as it doesn’t belong to me” with a rate of 11.5% for women and 1.9% for men, and for “Using computer is a waste of time” with a rate of 17.3% for women and 22.6% for men, and for “I don’t like to use computer at home” with a rate of 19.2% for women and 26.4% for men, and finally for “The computer has an important place at home” with a rate of 57.7% for women and 62.3% for men.

**Chart III****Use Status of The People Who Took the Questionnaire**

<b>USE STATUS</b>	<b>Women</b>	<b>Men</b>



	Yes	No	Yes	No
I do not share my computer	110 21.2%	410 78.8%	110 20.8%	420 79.2%
I cannot take my turn to use the computer because of the others at home	40 7.7%	480 92.3%	40 7.5%	490 92.5%
I don't have time to use computer at home	90 17.3%	430 82.7%	60 11.3%	470 88.7%
The computer at home belongs to me	190 36.5%	330 63.5%	350 66%	180 34%
I cannot use the computer at home comfortably as it doesn't belong to me	60 11.5%	460 88.5%	10 1.9%	520 98.1%
Using computer is a waste of time	90 17.3%	430 82.7%	120 22.6%	410 77.4%
I don't like to use computer at home	100 19.2%	420 80.8%	140 26.4%	390 73.6%
The computer has an important place at home	300 57.7%	220 42.3%	330 62.3%	200 37.7%

\*30 women and 20 men have computer at home.

\* The sum of the columns is not equal to a hundred percent as more than one item can be checked.

According to Chart IV, the top four purposes of men and women for using the Internet are reading newspapers and magazines, sending-receiving e-mail, using the Internet as a source of information and instant messaging. There is not a big difference between men and women in the top four purposes of using the Internet. While the fifth rank for women belongs to researching on health issues, it belongs to downloading and listening to music for men. Playing games online with other players is in the 11<sup>th</sup> rank for men with a rate of 10.8%, while it is not one of the purposes of using the Internet for women.

#### Chart IV

##### The Purpose of Using The Internet

PURPOSES OF USING THE INTERNET	woman	PURPOSES OF USING THE INTERNET	man
Reading online newspapers and magazines, downloading news	400 72.8%	Reading online newspapers and magazines, downloading news	390 70.8%
Receiving-sending e-mail	390 70.9%	Receiving-sending e-mail	370 67.2%
Using the Internet as a source of information	300 54.5%	Using the Internet as a source of information	220 40%
Instant messaging (MSN, Chat)	250 45.4%	Instant messaging (MSN, Chat)	210 38.1%
Researching on health issues	230 41.8%	Downloading and listening to music	180 32.8%
Video chat via the Internet	150 27.3%	Video chat via the Internet	170 31%

Downloading and listening to music	140 25.4%	Finding information about goods and services	150 27.3%
Finding information about goods and services	100 18.2%	Online banking	130 23.6%
Searching for information about educational activities	100 18.2%	Researching on health issues	100 18.2%
Using travel and accommodation services	80 14.6%	Downloading and updating computer and video games	80 14.6%
Online banking	80 14.6%	Playing games online with other players	60 10.8%
Watching and downloading movie, short movie and video files (except for web TV)	60 10.9%	Using travel and accommodation services	60 10.8%
Looking for and applying to jobs	40 7.2%	Sharing the text or video that you have created yourself with a web site	50 9%
Other information searching and online services	40 7.2%	Searching for information about educational activities	50 9%
Sharing the text or video that you have created yourself with a web site	40 7.2%	Watching and downloading movie, short movie and video files (except for web TV)	30 5.4%
Downloading software	20 3.6%	Looking for and applying to jobs	30 5.4%
Making online phone calls	20 3.6%	Listening to web radio and watching web TV	30 5.4%
Downloading and updating computer and video games	20 3.6%	Other information searching and online services	30 5.4%
Listening to web radio and watching web TV	20 3.6%	Downloading software	20 3.6%
Playing games online with other players	0 0%	Making online phone calls	10 1.8%

\*The sum of the columns is not equal to a hundred percent as more than one item can be checked.

**Chart V**

**Web Sites That People Who Took the Questionnaire Entered**

THE WEB SITES	women	THE WEB SITES	men
Search engines	330 60%	Searching engines	350 63.6%
Educational sites	300 54.5%	The sites of mass media	330 60%
The sites of mass media	290 52.7%	Sports sites	290 52.7%
Health sites	280 50.9%	e-mail sites	220 39.9%
e-mail sites	210 38.2%	The sites containing technical information	210 38.2%
Banking sites	180 32.8%	Game-entertainment sites	190 34.5%
Sites about culture-art	170 30.9%	Educational sites	150 27.3%

Game-entertainment sites	120 21.8%	Banking sites	150 27.3%
Shopping sites	80 14.5%	The sites about culture-art	110 20%
Children sites	70 12.7%	Shopping sites	100 18.2%
Law sites	70 12.7%	Financial sites	60 10.9%
The sites containing technical information	40 7.3%	Asking about dept	50 9.1%
The sites about Turkey	40 7.3%	Health sites	50 9.1%
Sports sites	30 5.5%	The sites about Turkey	30 5.5%
Asking about dept	20 3.6%	Law sites	30 5.5%
The sites about other countries	10 1.8%	Children sites	20 3.6%
Financial sites	0 0%	The sites about other countries	10 1.8%

\*The sum of the columns is not equal to a hundred percent as more than one item can be checked.

According to Chart V, when the web sites that the people who took the questionnaire entered were asked, the top five answers of the women were 60% searching engines, 54.5% educational sites, 52.7% the sites of mass media, 50.9% health sites, and 38.2 % e-mail sites. On the other hand, the top five answers of the men were 63.6% searching engines, 60% the sites of mass media, 52.7% sports sites, 39.9% e-mail sites, 38.2% the sites containing technical information. When the goods and services that they ordered or bought via the Internet were questioned, the top two answers of women were book-magazine and educational material, and reservations for holidays or trips; the third rank belongs to health-beauty and personal care products with a rate of 18.2%. On the other hand, the top three answers of men were electronic tools with 34.6%, additional hardware for computers and video games with a rate of 32.7% and household goods with 27.4%. 47.3% of the women and 45.5% of the women noted that they do not use the Internet for online shopping. For the question “For what purpose do you use the Internet while communicating with the governmental offices and institutions?”, the rate of “to get information from their web sites” was 65.5% for women and 54.5% for men. The second was “to fill out and send a form” with a rate of 40% for women and 27.3% for men. The rate of the women’s response as “I do not use the Internet while communicating with government offices and institutions” is 29.1% while the rate of men’s is 40%.

#### Chart VI

#### The Relationship between the People who took the Questionnaire and Information Technologies

RELATIONSHIP WITH INFORMATION TECHNOLOGIES	Women		Men	
	Yes	No	Yes	No
Information technologies hold an important place in my life	420 76.4%	130 23.6%	470 85.5%	80 14.5%
I do not like IT products but I need to use them	220 40%	330 60%	100 18.2%	450 81.8%

I feel myself distant from information technologies	140 25.5%	410 74.5%	50 9.1%	500 90.9%
I hesitate to use IT products	120 21.8%	430 78.2%	40 7.3%	510 92.7%
My IT usage is limited because I do not know enough	220 40%	330 60%	130 23.6%	420 76.4%
I do not hesitate to examine IT products and I seize all of its opportunities	310 56.4%	240 43.6%	440 80%	110 20%
I follow new information technologies closely	210 38.2%	340 61.8%	340 61.8%	210 38.2%
I always buy new IT products	190 34.5%	360 65.5%	270 49.1%	280 50.9%

\*The sum of the columns is not equal to a hundred percent as more than one item can be checked.

According to Chart VI, when the relationship between the participants and IT was questioned, they said “yes” for the statement “information technologies hold an important part in my life” with a rate of 76.4% for women and 85.5% for men. For the statement “I do not like IT products but I need to use them”, the response was “yes” with a rate 40% for women and 18.2% for men. In addition, the response was “yes” for the statement “I feel myself distant from information technologies” with a rate of 25.5% for women and 9.1% for men. The rate of the “yes” response for the statement “I hesitate to use IT products” was 21.8% for women and 7.3% for men. For the statement “My IT usage is limited because I do not know enough”, the response was “yes” with a rate 40% for women and 23.6% for men. The rate of the “yes” response for the statement “I do not hesitate to examine IT products and I seize all of its opportunities” was 56.4% for women and 80% for men. Moreover, the response was “yes” for the statement “I follow new information technologies closely” with a rate of 38.2% for women and 61.8% for men. And finally, for the statement “I always buy new IT products”, the response was “yes” with a rate 34.5% for women and 49.1% for men.

#### Chart VII

##### Personal Gains of the Participants after using Computer and the Internet

PERSONAL GAINS	Women		Men	
	Yes	No	Yes	No
It made my life easier	490 89.1%	60 10.9%	470 85.5%	80 14.5%
It saved time	480 87.3%	70 12.7%	470 85.5%	80 14.5%
It enabled me to have a job and profession	110 20%	440 80%	110 20%	440 80%
It was a good free time activity	460 83.6%	90 16.4%	430 78.2%	120 21.8%
It eased my access to information	490 89.1%	60 10.9%	470 85.5%	80 14.5%
It enabled me to communicate	360 65.5%	190 34.5%	270 49.1%	280 50.9%
It had contributions to my education	340 61.8%	210 38.2%	330 60%	220 40%
It enhanced my vocational knowledge	420 76.4%	130 23.6%	350 63.6%	200 36.4%

<b>It made my housework easier</b>	<b>160</b> <b>29.1%</b>	<b>390</b> <b>70.9%</b>	<b>80</b> <b>14.5%</b>	<b>470</b> <b>85.5%</b>
<b>It helped me find a partner and friends</b>	<b>70</b> <b>12.7%</b>	<b>480</b> <b>87.3%</b>	<b>110</b> <b>20%</b>	<b>440</b> <b>80%</b>
<b>It improved my communication and language skills</b>	<b>230</b> <b>41.8%</b>	<b>320</b> <b>58.2%</b>	<b>300</b> <b>54.5%</b>	<b>250</b> <b>45.5%</b>
<b>It helped me know different cultures.</b>	<b>280</b> <b>50.9%</b>	<b>270</b> <b>49.1%</b>	<b>330</b> <b>60%</b>	<b>220</b> <b>40%</b>

\*The sum of the columns is not equal to a hundred percent as more than one item can be checked.

According to Chart VII, when the personal gains of the people were questioned, they said “yes” for the statement “It made my life easier” with a rate of 89.1% for women and 85.5% for men. For the statement “It saved time”, the response was “yes” with a rate 87.3% for women and 85.5% for men. In addition, the response was “yes” for the statement “It enabled me to have a job and profession” with a rate of 20% for both women and men. The rate of the “yes” response for the statement “It was a good free time activity” was 83.6% for women and 78.2% for men. For the statement “It eased my access to information”, the response was “yes” with a rate 89.1% for women and 85.5% for men. The rate of the “yes” response for the statement “It enabled me to communicate” was 65.5% for women and 49.1% for men. Moreover, the response was “yes” for the statement “It had contributions to my education” with a rate of 61.8% for women and 60% for men. For the statement “It enhanced my vocational knowledge”, the response was “yes” with a rate 76.4% for women and 63.6% for men. In addition, the response was “yes” for the statement “It made my housework easier” with a rate of 29.1% for women and 14.5% for men. For the statement “It helped me find a partner and friends”, the response was “yes” with a rate 12.7% for women and 20% for men. Moreover, the response was “yes” for the statement “It improved my communication and language skills” with a rate of 41.8% for women and 54.5% for men. And finally, for the statement “It helped me know different cultures”, the response was “yes” with a rate 50.9% for women and 60% for men.

### Conclusion

In the study titled as “Information Technologies and Women” in which the relationship between women and Information technologies are examined, the subject group was composed of 1,100 people, 550 women and 550 men between the ages of 16-64 and living in Eskisehir. The people in the sampling took a questionnaire of 25 questions by interview method and the following results were obtained.

All of the participants who took the questionnaire had cell phones. Other IT products that they mostly possessed were DVD-VCD player, digital camera, desktop computer and laptop computer, respectively. There was no significant difference between men’s and women’s possession of IT products.

32.7% of the women and 61.8% of the men who took the questionnaire and have a personal computer at home stated that they bought their computer by themselves. However 30.9% of the women and 7.3% of the men noted that their spouses or partners bought their computer. The people in the subject group stated that their primary use of computer is at work, then secondly at home, but they also stated that they use the Internet mostly at home and secondly at work. The people are active users of the internet and computer for more than a year and the frequency of use is “every day” with a rate of 87.3% for women and 90.9 for men. Majority of the participants have specified that they have learned how to use the internet and computer by themselves with the trial and error method. No gender difference was observed about the purchase of the computer except that one of three women has noted that their spouses or partners bought the computer.

Women noted their computer usage as follows: communication (MSN, e-mail, chat), work purposes, research, surfing on the Net and typing. Men’s responses include mostly surfing on the Internet, communication (MSN, e-mail, chat), work purposes, playing computer games and research. If compared to the previous researches, these results indicate that women are getting used to information technologies and women started to live together with technology in the workplace or for educational purposes in accordance with their education level. The results also show that they are making up the distance in using IT and this is a positive result in terms of women and their use of communication tools.

Women and men have equally responded as “Yes” to the statements, “I do not share my computer”, and “I cannot take my turn to use the computer because of others”, that explain participants’ computer use status. Women stated that they do not have time to use a computer and that they cannot use the computer comfortably because it does not belong to them more frequently than men. This results show that although women take roles in work life, they still keep their traditional roles at home and they allocate less time for their privacy.

The number of men who own a computer at home is twice that of women’s ownership. Even if not everyone has a personal computer, men and women participants all noted that information technologies have a very important part in their lives and that they need to use information technologies by responding as “yes” with a rate above 50% to the statement “ computer holds an important place at home”. In addition, they responded “yes” with a lower rate to the statements “I do not like using a computer at home” and “I feel sorry for the time I spend on the computer”.

When purposes of women and men to use the Internet were researched, most responses were reading an online newspaper or magazine, sending-reading e-mail, reaching information and instant messaging. There was not a major difference between men and women in terms of these primary purposes. However, according to women, the other purpose of use can be researching on educational and health issues while men listed downloading music and video chat on the Internet as their other purposes. Playing multiplayer games online is not a purpose of use for women, but it has a rate of 10.8% for men among their purposes of internet use. This data denotes that women who attend institutional and work life use the Internet for nearly the same purposes as men and that women have improved themselves. The data also proves that women have showed positive improvement in using information technologies compared to previous research.

The top five websites that women in the sample visit are search engines, educational sites, online media, sites about health issues and e-mail sites. Men, on the other hand, visit mostly search engines, online media, sports, e-mail and sites on technical information, respectively. When the goods and services that they ordered or bought via the Internet were questioned, the top two answers of women were book-magazine and educational material, and reservations for holidays or trips; the third rank belongs to health-beauty and personal care products. On the other hand, the top three answers of men were electronic tools, additional hardware for computers and video games and household goods. No significant difference was noted between men and women in terms of the web sites they entered apart from the fact that women entered educational and health sites and men entered sports sites and web sites that include technical information. This data indicates that the Internet technology maintains and continues the sexism in daily life and the discriminations between men and women as it was revealed in a great deal of previous research on internet usage practice of men and women (18). Other data that supports this idea is that men preferred to buy electronic gadgets, additional computer hardware and video games while women preferred books-magazines and educational materials, online reservations for holidays, health-beauty and personal care products via the Internet.

Considering the relationship between information technologies and the people who took the questionnaire, women stated that information technologies hold an important part in their lives. However, they also state that they do not like IT products but they need to use them, that they feel themselves distant from IT, that they hesitate to use IT products and their use is limited as they do not know enough. This data proves that women’s technology phobia continues. Women’s responding as “yes” and men’s as “no” to the statements like “I do not hesitate to examine IT products and I seize all of its opportunities” and “I follow new information technologies closely and buy new IT products” also supports this idea.

When the personal gains of the people were questioned, no gender difference was noted on the statements like “it made my life easier”, “it saved time”, “it enabled me to have a job and a profession”, “It eased my access to information” and “It had contributions to my education”. However, women said “yes” with a higher rate compared to men for the statements like “It was a good free time activity”, “It enabled me to communicate”, “It enhanced my vocational knowledge” and “It made my housework easier”. On the other hand, men have a higher rate of “yes” for the statements of “it enabled me to find a partner and friends”, “It improved my communication and language skills” and “It helped me know

different cultures”. These results points out that women use information technologies, but they cannot get rid of their traditional roles while using them.

When the general findings of the study were evaluated, no obvious difference between men and women was recognized in terms of their age, education level, occupation and marital status. However, it was observed that the use of information technologies increases in accordance with higher education levels and work status of both men and women. In conclusion, it was detected that women value information technologies as an important part of their lives, use them and are gradually catching up with men on IT use, but they still feel hesitation and fear hen using information technologies.

In this case, what women should do is to discover the opportunities that technology offer in a way that go beyond the sex limitations and to use technology to their advantage. In order to achieve this goal, the steps that should be taken may be listed as follows.

- Women’s self-esteem in using the new communication technologies such as computer and computer networks should be reinforced and promoted.
- Women’s prejudice about “new information technologies are only for men” should be revisited and changed.
- Some educational programs that have the principle of “teaching by doing and using” should be established and practiced for the purpose of increasing women’s computer literacy.
- The differences in using new information technologies between men and women should be highlighted and examined.
- The preferences of women related to communication types and tools should be revealed (19).

Women’s use of information technology is beneficial for strengthening themselves and for eliminating discrimination. Women can take greater advantage of the opportunities offered by information technologies as they achieve higher levels of education, participate more in the workplace and in public life, move away from their traditional roles, and gain self-confidence. Through education and communication, they can make up for their differences from men in social life an in the professional arena.

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