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Examination of the Influence of Gender on the Use of Domestic Technologies

Ayfer Aydıner Boylu[1], Gülay Günay[2] and Nihan Gürsoy[1]

[1]Department of Family and Consumer Sciences, Faculty of Economics and Administrative Sciences, Hacettepe University, Ankara, Turkey, [2]Department of Social Work, Faculty of Economics and Administrative Sciences, Karabük University, Karabük, Turkey

Abstract

Gender involves clues regarding the social roles and responsibilities of women and men. Given the relationship between the concepts of gender and technology, women, who are considered as the laborers of the domestic production process, constitute the largest group that use domestic technologies. This study was carried out to analyze the influence of gender on the use of domestic technologies. The study includes participation's (177 married men) demographic variables such as age, working status, education, and spouses working status. Chi-square test, Kruskal–Wallis H-test, and Mann–Whitney U-test were used in data analysis. Those who were the age of 46 and over (39.0%), those who had a job (88.1%), those who had a non-working spouse (71.2%), and those who graduated from high school (35.0%) ranked the first. The results of this study show that cooker was the technology the male participants use the most.

Keywords: Gender; Technology; Domestic Technologies; Social Roles; Social Responsibilities; Work Sharing

1. Introduction

Gender identity still plays an important role in performing household chores (Butler, 1990; Jackson and Scott, 2002). Therefore, domestic technologies represent one of the essential indicators of traditional gender roles (Cockburn and Ormrod, 1993; Wajcman, 1991a; 2004). Individuals also show their gender identities through the daily use of the domestic technologies. The concept of gender appearing by the social-cultural aspect in the daily use of domestic technologies, highlights the role and responsibilities of woman and man, and includes hints on how the society perceives us, how it wants us to behave and what it expects from us (Zeybekoğlu Dündar, 2012). These roles and responsibilities expected are known by every individual of that society (Richard and Lamm, 1995). It is seen in the literature that gender is related to domestic technology, and a large part of the domestic technologies are designed over the acceptance of woman should work as home workers (Kocabıçak, 2004; Sundin, 1995; Grint and Woolgar, 1997; Gill and Grint, 1995; Wajcman, 1991b; Webster, 1996).

This view can be explained by the exchange and bargaining theory suggesting that the relative share of resources within households has an important influence on how time will be allocated among household members. These theories predict that the person contributing more financial resources will do less domestic labor (Bittman et al., 2004). According to the traditional gender roles, it is the men who generally seen as the breadwinner and are responsible of earning money. As a result the housewife's financial dependence on the male provider, and not her gender *per se*, is responsible for the traditional sexual division of domestic labor (Bergmann, 1986).

Indeed, in the post-industrial revolution period, technology entering into the house has made an effect on the re-distribution of the economic roles, caused the economic activities of women to be

restricted within the house (Cowan, 1993; Habib and Cornford, 2001). Before we mention the effects of in-house technology, which is defined as the area of woman, the concept of in-house is one that is referred by ideals of love, care, peace, and respect. In this respect, domestic life is also perceived as a place where sincerity, safety, intimacy, warmth, human, and family values are experienced (Habib and Cornford, 2001). This concept evokes the concepts of natural, emotional, and love which are identified with woman as a meaning. The concept of home is encountered as a female zone not only by what it evokes in terms of meaning but also by the activities performed in-house. Household chores, in this context, unlike work done outside the house, are defined as the reproduction activities of the family. These activities include works such as cooking, cleaning, care of children, and other family members (Saphiro, 1998. p. 276).

Seen as the laborer of in-house production process, women form the largest group using domestic technologies (Kocabıçak, 2004). Studies on domestic technologies performed by researchers such as Cockburn (1988; 1997) and Wajcman (1991b), agree on the point that domestic technologies support the work sharing based on traditional gender perception between spouses and imprison the women within their traditional roles. The household chores undertaken by men are usually non-routine, sporadic, not needed to be performed continuously, and the chores which usually undertaken outside the house. These kinds of household chores are in contrast to those performed by women, which have the essential nature of being never ending. Men usually tend to stay away from works and technologies such as cleaning, washing clothes, washing dishes, and cooking. When they want to help with some of the household chores, they do works such as easy repairs and grocery shopping. Man defines its relationship with domestic technologies as helping his spouse (Cockburn and Fürst-Dilic, 1994).

Despite the importance of domestic technologies in quality of life of the societies, to the best of our knowledge no previous study has directly focus on the effect of gender on the use of domestic technologies. This study was designed to help fill this gap by describing the relationship between gender and the use of domestic technologies, including the effect of demographic factors, based on a sample of married men from Turkey.

2. Method

2.1. Participants

The sample of this study consisted of married men who have been dwelling in Ankara city, Turkey. The study sample consisted of only married men who agreed to participate voluntarily. In total, 250 men were interviewed and completed the questionnaire. Incomplete and incorrectly completed questionnaires were not used in the study (73 questionnaires). Finally, a total of 177 were conducted. The participation rate was 70.8%.

2.2. Procedure

Researchers met individually with each person who volunteered to participate in the study. No individuals who refused to participate were included in the study. Information about the target of the study and how to fill the questionnaire was given to the participants after the researcher answered all questions that they had. The participants were reassured that this research was being conducted for academic purposes only and no information about them would be used for any other purpose; therefore, it was not necessary for them to provide their name or any other information that might reveal their identity. The participants were given 2 days to fill the questionnaire. The data were collected between June 5 and 15 2014.

2.3. Measurement variables

2.3.1. Demographic variables

The study included demographic variables such as age (coded as the number of years old at the time of the interview), education (1 = Primary education, 2 = Secondary education, 3 = High school education,

4 = College and over), working status (1 = Working, 2 = Not working), and spouses working status (1 = Working, 2 = Not working). These demographic characteristics were selected according to their potential effects on the results.

2.3.2. Behaviors related to use of technologies

The domestic technologies (dishwasher, washing machine, vacuum cleaner, cooker, oven, and iron) identified with the roles of women within the framework of gender concept were examined in the study. The behaviors of married men related to mentioned the domestic technologies were measured by the questions of status of being able to use the technologies (1 = yes, 2 = no), frequency of use (1 = never, 2 = occasionally, 3 = frequently), frequency of maintaining and cleaning (1 = never, 2 = occasionally, 3 = frequently), and what kind of a method is pursued in the event of technologies get broken (1 = I always repair myself, 2 = I always call a repairman, 3 = I try to repair myself, call a repairman if I cannot or ask help from someone experienced).

2.4. Data analysis

The data were coded and analyzed using SPSS. Data analysis began with calculating the frequencies of the sample on all variables and the graphs for these distributions were obtained. The non-parametric Mann–Whitney U-test, Chi-square test, and Kruskal–Wallis H-test were used because of the variables was categorical. Statistical significance was taken at the 5% level (Büyüköztürk, 2007. p. 146-166). Mann–Whitney U-test was performed for variables, working status and spouses working status, whereas Kruskal–Wallis H-test was performed for age and education (Büyüköztürk, 2007. p. 155). Kruskal–Wallis H-test is the non-parametric counterpart of the one-way ANOVA (Büyüköztürk, 2007. p. 158).

To determine the differences between variables, Chi-square test was performed. The Chi-square test performed to determine whether the observed frequencies in the different categories from the variable survival have a significant difference. The Chi-square test was chosen because it does not require the data to be normally distributed and it can also be used for nominal data as is relevant for propositions two and five. For proposition two, however, one or more cells contained less than five observations (Büyüköztürk, 2007. p. 146).

3. Results

3.1. Description of the sample

The average age of the respondents in this study was 41.2 (S = 10.2). Of the participants, 39.0% were over 46 years of age. The proportion of participants who working was the highest (88.1%). Furthermore, there were proportionally more participant had a nonworking spouse (71.2%). The highest proportion of the participants had a high school education (35.0%) followed by college education (27.7%), secondary education (19.8%), and primary education (17.5%) (Table 1).

3.2. Ownership of domestic technologies

The results of the study indicated that nearly all the families have domestic technologies (washing machine 100%, cooker 99.4%, vacuum cleaner 98.9%, iron 98.3%, and oven 97.2%) except dishwasher (79.1%) (Figure 1).

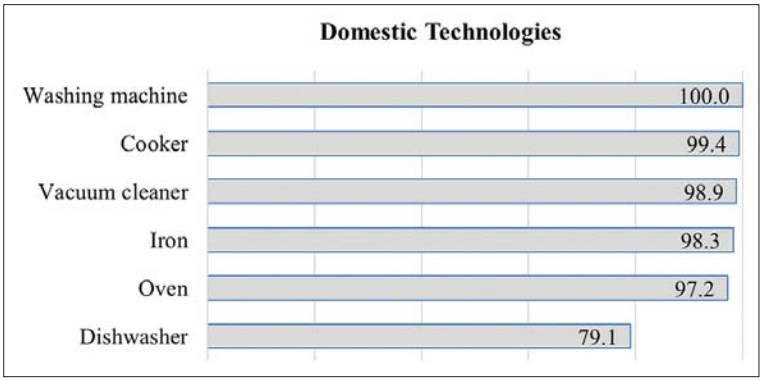
3.3. Being able to use domestic technologies

The status of individuals being able to use the technologies and the relationship between demographic variables (age, employment status, employment status of spouses, and education) are given in Table 2. According to the results, almost all the participants could use the cooker (96.6%), 91.4% of the participants could use the vacuum cleaner, and those being able to use washing machine (57.1%) had

Table 1: Characteristics of the sample

Demographic variables	N (%)
Age (M=41.2; S=10.2)	
≤35	63 (35.6)
36-45	45 (25.4)
≥46	69 (39.0)
Working status	
Working	156 (88.1)
Not working	21 (11.9)
Spouses working status	
Working	51 (28.8)
Not working	123 (71.2)
Education	
Primary education	31 (17.5)
Secondary education	35 (19.8)
High school education	62 (35.0)
College and over	49 (27.7)

Figure 1: The status of ownership of domestic technologies



the lowest ratio. These results can be explained by the fact that household chores such as laundry regarded as women's responsibility in household. Also in Aaltojärvi' (2012) study, washing machine is regarded as feminine (64.0%). One commonly-used way to divide the technology into masculine and feminine categories was by their color. Electrical consumer goods divided into brown goods and white goods. The choice of colors for these designations only loosely reflects material fact. Brown goods are normally black, white goods are normally white or off-white but may also come in options of brown or gray. The real distinction is one of the functions. Brown goods are for leisure and entertainment. They include television, music systems, and cameras. White goods are for domestic work. They include washing machines and dishwashers, fridge and freezers, cookers and microwaves, and vacuum cleaners (Cockburn and Ormrod, 1993).

The relationship between demographic variables (age, working status, spouses working status, and education) and being able to use domestic technologies were examined statistically. According to the results, there were a significant relationship between the employment status of the spouse and being able to use the washing machine ($\chi^2 = 5.350$, df = 1, $P < 0.05$), education level and being able to use both the dishwasher ($\chi^2 = 12.722$, df = 3, $P < 0.05$), and washing machine ($\chi^2 = 12.980$, df = 3, $P < 0.05$)

Table 2: Relationship between demographic characteristics and the status of being able to use domestic technologies

			Chi-square analysis			
Domestic technologies	**Being able to use**	**F (%)**	**Age**	**Working status**	**Spouses working status**	**Education**
Dishwasher	Can use	82 (58.6)	χ^2=2.195, df=2, P>0.05	χ^2=1.057, df=1, P>0.05	χ^2=2.196, df=1, P>0.05	χ^2=12.722, df=3, P<0.05
	Cannot use	58 (41.4)				
	Total	140 (100.0)				
Washing machine	Can use	101 (57.1)	χ^2=5.043 df=2, P>0.05	χ^2=1.962, df=1, P>0.05	χ^2=5.350, df=1, P<0.05	χ^2=12.980, df=3, P<0.05
	Cannot use	76 (42.9)				
	Total	177 (100.0)				
Vacuum cleaner	Can use	160 (91.4)	χ^2=1.352 df=2, P>0.05	χ^2=0.368, df=1, P>0.05	χ^2=0.664 df=1, P>0.05	χ^2=2.654, df=3, P>0.05
	Cannot use	15 (8.6)				
	Total	175 (100.0)				
Cooker	Can use	170 (96.6)	χ^2=Not implemented	χ^2=0.842, df=21, P>0.05	χ^2=1.334, df=1, P>0.05	χ^2=0.099, df=3, P>0.05
	Cannot use	6 (3.4)				
	Total	176 (100.0)				
Oven	Can use	113 (65.7)	χ^2=0.363, df=2, P>0.05	χ^2=2.470, df=1, P>0.05	χ^2=0.166, df=1, P>0.05	χ^2=6.827, df=3, P>0.05
	Cannot use	59 (34.3)				
	Total	172 (100.0)				
Iron	Can use	129 (74.1)	χ^2=0.897, df=2, P>0.05	χ^2=0.052, df=1, P>0.05	χ^2=1.257, df=1, P>0.05	χ^2=3.437, df=3, P>0.05
	Cannot use	45 (25.9)				
	Total	174 (100.0)				

(Table 2). This results obtained from the study is an indication of education level as well as employment of women is effective in sharing of household chores between spouses.

3.4. Frequency of use of the domestic technologies

When the usage frequency of the domestic technologies by men are examined, the ratio of those using the cooker frequently (44.7%) is in the first place compared to those using other domestic technologies. Moreover, among those stating the occasional use of domestic technologies, the ratio of those using dishwasher (63.4%) and iron (61.3%) is higher compared to other technologies. These results are an indication that married men mostly enjoy cooking among the household chores. Also according to the results of Mann–Whitney U-test, there is a significant relationship between the usage frequency of the cooker from domestic technologies and employment status of the spouse ($U = 2277{,}000$, $P < 0.05$) (Table 3).

Table 3: Relationship between demographic characteristics and the frequency of use of the domestic technologies

Domestic technologies	Frequency of use	F (%)	Kruskal–Wallis H-test		Mann–Whitney U-test	
			Age	Education	Working status	Spouses working status
Dishwasher	Never	17 (20.7)	χ^2=(df=2, n=82)=1.319, P>0.05	χ^2=(df=3, n=82)=1.265, P>0.05	U=275.500; P>0.05	U=704.000; P>0.05
	Occasionally	52 (63.4)				
	Frequently	13 (15.9)				
	Total	82 (100.0)				
Washing machine	Never	26 (25.7)	χ^2=(df=2, n=101)=5.685, P>0.05	χ^2=(df=3, n=101)=4,864, P>0.05	U=403.500; P>0.05	U=1087.500; P>0.05
	Occasionally	52 (51.5)				
	Frequently	23 (22.8)				
	Total	101 (100.0)				
Vacuum cleaner	Never	40 (25.0)	χ^2=(df=2, n=160)=1.884, P>0.05	χ^2=(df=3, n=160)=6.216, P>0.05	U=1223.500; P>0.05	U=2368.000; P>0.05
	Occasionally	87 (54.4)				
	Frequently	33 (20.6)				
	Total	160 (100.0)				
Cooker	Never	6 (3.5)	χ^2=(df=2, n=170)=1.787, P>0.05	χ^2=(df=3, n=170)=3.139, P>0.05	U=1315.500; P>0.05	U=2277.000; P<0.05
	Occasionally	88 (51.8)				
	Frequently	76 (44.7)				
	Total	170 (100.0)				
Oven	Never	35 (31.0)	χ^2=(df=2, n=113)=0.336, P>0.05	χ^2=(df=3, n=113)=1,396, P>0.05	U=806.000; P>0.05	U=1299.000; P>0.05
	Occasionally	59 (52.2)				
	Frequently	19 (16.8)				
	Total	113 (100.0)				
İron	Never	31 (24.0)	χ^2=(df=2, n=129)=5.967, P>0.05	χ^2=(df=3, n=129)=3.832, P>0.05	U=1508.000; P>0.05	U=1533.000; P>0.05
	Occasionally	79 (61.3)				
	Frequently	19 (14.7)				
	Total	129 (100.0)				

3.5. Frequency of maintaining and cleaning of the domestic technologies

The frequency of maintaining and cleaning of the technologies which used are given in Table 4. The ratio of married men who stated they frequently take care of maintaining and cleaning of domestic technologies are considerably low in every category (dishwasher: 2.9%; washing machine: 3.4%;

Table 4: Relationship between demographic characteristics and the frequency of maintaining and cleaning of the domestic technologies

Domestic technologies	Frequency of use	F (%)	Kruskal–Wallis H-test		Mann–Whitney U-test	
			Age	Education	Working status	Spouses working status
Dishwasher	Never	98 (70.0)	χ^2=(df=2, n=140)=1.904, P>0.05	χ^2=(df=3, n=140)=8.131, P<0.05	U=824.500; P>0.05	U=704.000; P>0.05
	Occasionally	38 (27.1)				
	Frequently	4 (2.9)				
	Total	140 (100.0)				
Washing machine	Never	116 (65.5)	χ^2=(df=2, n=177)=1.312, P>0.05	χ^2=(df=3, n=177)=11.000, P<0.05	U=1510.500; P>0.05	U=2942.000; P>0.05
	Occasionally	55 (31.1)				
	Frequently	6 (3.4)				
	Total	177 (100.0)				
Vacuum cleaner	Never	75 (42.8)	χ^2=(df=2, n=175)=0.163, P>0.05	χ^2=(df=3, n=175)=8.174, P<0.05	U=1540.500; P>0.05	U=2752.000; P>0.05
	Occasionally	85 (48.6)				
	Frequently	15 (8.6)				
	Total	175 (100.0)				
Cooker	Never	89 (50.6)	χ^2=(df=2, n=176)=0.613, P>0.05	χ^2=(df=3, n=176)=1.953, P>0.05	U=1389.500; P>0.05	U=2933.000; P>0.05
	Occasionally	69 (39.2)				
	Frequently	18 (10.2)				
	Total	176 (100.0)				
Oven	Never	114 (66.3)	χ^2=(df=2, n=172)=0.150, P>0.05	χ^2=(df=3, n=172)=2.586, P>0.05	U=1576.000; P>0.05	U=2864.500; P>0.05
	Occasionally	49 (28.5)				
	Frequently	9 (5.2)				
	Total	172 (100.0)				
Iron	Never	101 (58.0)	χ^2=(df=2, n=174)=1.673, P>0.05	χ^2=(df=3, n=174)=3.059, P>0.05	U=1508.000; P>0.05	U=2931.000; P>0.05
	Occasionally	66 (38.0)				
	Frequently	7 (4.0)				
	Total	174 (100.0)				

vacuum cleaner: 8.6%; cooker: 10.2; oven: 5.2%; iron: 4.0%). On the other hand, 48.6% of the individuals occasionally take care of vacuum cleaner, 39.2% of cooker, 38.0% of iron, 31.1% of washing machine, 28.5% of oven, and 27.1% of dishwasher. This result of the study shows that married men, although using the technologies, do not care about the maintaining and cleaning.

No relationship was found between the age of married men, employment status and spouse's employment status, and frequency of maintaining and cleaning of the technologies. However, there is a significant relationship between the education level of men and the maintaining and cleaning of dishwasher ($\chi^2 = 8.131$, df = 3, $P < 0.05$), washing machine ($\chi^2 = 11.000$, df = 3, $P < 0.05$), and vacuum cleaner ($\chi^2 = 8.174$, df = 3, $P < 0.05$) (Table 4). This result is an indication that the education level is an effective variable on the viewpoint on household chores, especially cleaning chores.

3.6. Status of repairing of the domestic technologies

Although not changed in terms of participants' age, employment status and spouse's employment status, and education levels, the first way in behaving in the case of domestic technologies are broken is "I try to repair myself, call a repairman if I can't or ask help from someone experienced." This result reinforces thought "The belief, works performed by men require more physical strength and skill, if it doesn't require physical strength, it is of complexity requiring more mental ability, construing the origin of gender-based work-sharing," which was expressed by Gökbayrak (2007). It was determined that the ratio of the participants who stated they would always call a repairman in case of a domestic technology breaking down, were proportionally high among participants aged 35 and lower (39.7%), unemployed (47.6%), stating their spouse is employed (43.1%), and had secondary education (48.6%).

No significant relationship was found between participants' age, employment status, spouse's employment status, and education levels and "the way of behaving for repair" in the case of domestic technologies breaking down (Table 5).

4. Conclusion

This study explored the influence of gender on the use of domestic technologies and included the effects of demographic factors in a sample of Turkish families. The results indicated that almost all of the married men within the scope of the study can use the cooker. Furthermore, the cooker is the most frequently used technology among other domestic technologies. Those being able to use washing machine among domestic technologies is the lowest ratio. The ratio of married men who state they frequently take care of maintaining and cleaning of domestic technologies were lowest in every category and the first way of behaving they follow in case of breaking down is "I try to repair myself, call a repairman if I can't or ask help from someone experienced."

Women remaining within the production process of technology according to stereotypes arising within the framework of traditional gender roles, are less compared to men, in other words, men are the essential actors in this area (Savcı, 1999; Faulkner, 2001; Stanworth, 2000). As a result, the production of technology is considered primarily a male work. However, technologies developed as household chores oriented are simplifying the household chores left to responsibilities of women but not taking these chores out from the responsibility area of women (Bray, 2007; Gökbayrak, 2007). The change in the use of domestic technologies depends on the changing of traditional gender stereotypes that are without biological origin. For this purpose, getting free of stereotypes defining the technology as male and household chores as female is encountered as an important starting point. Today, women have the responsibility of being a mother, a spouse and a housewife as well as providing or contributing to household income. In decreasing of this role and responsibilities burdened on the woman in terms of quality life of the family, the gender viewpoint must be eliminated and an equalitarian approach must be supported. For this purpose, equalitarian approach on woman and man roles should be engrained to individuals of every age since childhood through both formal and non-formal education.

Some limitations of this study are worth noting. First, this study has some methodological limitations. The study sample included only 177 married men, which limits the generalizability of the results. Different findings may have been obtained if more married men had been asked to participate in the study. In addition, this study is limited with the survey questions applied depending on the subject. The information, attitudes, and behaviors can be measured or compared with different questions which can affect the use of domestic technologies in the further studies.

Table 5: Relationship between demographic characteristics and the status of repairing of the domestic technologies

Demographic variables	Always call a repairman	Try to repair myself, if can't call a repairman or ask help from someone experienced	Total
	F (%)	F (%)	F (%)
Age (M=41.2, SD=10.2)			
≤35	25 (39.7)	38 (60.3)	63 (100.0)
36-45	14 (31.1)	31 (68.9)	45 (100.0)
≥46	26 (37.7)	43 (62.3)	69 (100.0)
Total	65 (36.7)	112 (63.3)	177 (100.0)
		χ^2=0.875, df=2, P>0.05	
Working status			
Working	55 (35.3)	101 (64.7)	156 (100.0)
Not working	10 (47.6)	11 (52.4)	21 (100.0)
Total	65 (36.7)	112 (63.3)	177 (100.0)
		χ^2=1.217, df=1, P>0.05	
Spouses working status			
Working	22 (43.1)	29 (56.9)	51 (100.0)
Not working	43 (34.1)	83 (65.9)	126 (100.0)
Total	65 (36.7)	112 (63.3)	177 (100.0)
		χ^2=1.268, df=1, P>0.05	
Education			
Primary education	12 (38.7)	19 (61.3)	31 (100.0)
Secondary education	17 (48.6)	18 (51.4)	35 (100.0)
High school education	22 (35.5)	40 (64.5)	62 (100.0)
College and over	14 (28.6)	35 (71.4)	49 (100.0)
Total	65 (36.7)	112 (63.3)	177 (100.0)
		χ2=3.609, df=3, P>0.05	

SD: Standard deviation

The results of this study help to further document the influence of gender on the use of domestic technologies of selected Turkish married men. This study provides a good foundation for future studies related to this subject.

References

Aaltojärvi, I. (2012), Ascribing gender from domestic technologies. International Journal of Gender, Science and Technology, 4(2), 1-7.

Bergmann, B. (1986), The Economic Emergence of Women. New York: Basic Books.

Bittman, M., Rice, J.M., Wajcman, J. (2004), Appliances and their ımpact: The ownership of domestic technology and time spent on household work. The British Journal of Sociology, 55(3), 401-423.

Bray, F. (2007), Gender and technology. Annual Review of Anthropology, 36, 37-53.

Butler, J. (1990), Gender Trouble. New York: Routledge.

Büyüköztürk, Ş. (2007), Data Analysis Handbook for Social Sciences. Ankara: Pegem A Yayıncılık.

Cockburn, C. (1988), Machinery of Dominance: Women, Men and Technical Know-how. Boston: Norheastern

University Publish.
Cockburn, C. (1997), Domestic technologies: Cinderella and the engineers. Women's Studies International Forum, 20(3), 361-371.
Cockburn, C., Fürst-Dilic, C. (1994), Bringing Technology Home: Gender and Technology in a Changing Europe. Milton Keynes: Open University Press.
Cockburn, C., Ormrod, S. (1993), Gender and Technology in the Making. London: Sage.
Cowan, R.S. (1993), The Industrial Revolution in the Home. The Social Shaping of Technology. Buckingham: Open University Press.
Faulkner, W. (2001), The technolgy question in feminism: A view from feminist. Science Direct, 24(1), 79-95.
Gill, R., Grint, K. (1995), The Gender Technology Relation: Contemporary Theory and Research. London: Taylor and Francis Ltd.
Gökbayrak, Ş. (2007), Domestic technology and gender. Is-Guc. The Journal of Industrial Relations and Human Resources, 9(4), 119-141.
Grint, K., Woolgar, S. (1997), The Machine at Work: Technology, Work and Organization. Cambridge: Polity Press.
Habib, L., Cornford, T. (2001), Computers in the Home: Domestic Technology and Process of Domestication, Global Cooperation in The New Millennium, The 9th European Conference on Information Systems, Bled, Slovenia, June, 27-29.
Jackson, S., Scott, S. (2002), Gender: A Sociological Reader. London: Routledge.
Kocabıçak, E. (2004), Effects of Gender on the Technological Change. Istanbul University Social Sciences Institute Department of Women's Studies. Master Thesis. İstanbul.
Richard, S.T., Lamm, R.P. (1995), Sociology. 5th ed. New York: McGraw-Hill Inc.
Saphiro, S. (1998), Places and spaces: The historical ınteraction of technology, home and privacy. The Information Society, 14, 275-284.
Savcı, İ. (1999), Gender and technology. Ankara University SBF Journal, 54(1), 123-142.
Stanworth, C. (2000), Women and work in information age. Gender, Work and Organization, 7(1), 20-32.
Sundin, E. (1995), The social construction of gender and technology. The European Journal of Women's Studies, 2, 335-353.
Wajcman, J. (1991a), Patriarchy, technology and conceptions of skill. Work and Occupations, 18(1), 29-45.
Wajcman, J. (1991b), Feminism Confronts Technology. Pennsylvania: The Pennsylvania State University.
Wajcman, J. (2004), TechnoFeminism. Cambridge: Polity Press.
Webster, J. (1996), Shaping Women's Work: Gender, Employment and Information Technology. London: Longman Sociology Series.
Zeybekoğlu Dündar, Ö. (2012), The reflection of gender roles in television advertisement. ETHOS: Dialogues in Philosophy and Social Sciences, 5(1), 121-136.