

The impact of household technologies on women's life: A case study of urban Bangladesh

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Abstract

The study investigates the impact of modern household technologies on women's lives in the urban areas of Bangladesh. It highlights the present condition of contemporary household technologies' uses; thus, it finds that all women use modern technologies in their daily lives. The study finds some positive impacts of these technologies, such as saving women's time, making their lives easier and more comfortable, securing and enlarging their choices, creating sources of income, etc. Besides, the study also shows some demerits of household technologies in urban women's lives. However, a study finds that the positive impact of household technologies is more influential and significant than negative. The study finds some challenges and suggests some recommendations to overcome those challenges. This study employs both qualitative and quantitative methodologies. A random sampling method was used to conduct a sample survey in Dhaka in 2014. A self-administered questionnaire was designed to collect data from 32 respondents residing in Dhaka metropolitan city. Thus, the data were carefully analyzed using SPSS to show the findings and recommendations.

Keywords: Household, Technology, Women, Modern, Urban, Bangladesh.

1. Introduction

The issue of women is vital in present-day Bangladesh. They consist of about 50% of the total population of the state. Therefore, any changes to them may impact all aspects of life, such as social, political, economic, national, and international life. The present government emphasizes their empowerment more. Since they were not sound and well-contributed to any sector of the country in the near past, all are concerned with using any issues that may lead to women being empowered in Bangladesh. A study shows that within a few decades, women's labor has increased dramatically to a noticeable percentage compared to men's. (Coen Pirani, Leon and Lugauer, 2008). Many studies show that technology has a significant influence on women's employment. For example, Greenwood, Seshadri, and Yorukoglu (2005) suggest that the widespread adoption of home appliances, including washing machines and freezers, significantly reduced women's household workload and facilitated their entry into the workforce. It proves that, because of household technological development, women get more time to do work and earn money rather than work at home. The study, therefore, investigates the role of household technology in the life of Bangladeshi women. It also emphasizes the need to determine how this technology impacts women's lives. What are the reasons behind this? The study concludes by identifying the challenges of household technologies in changing women's lives and providing suggestions to overcome those challenges in Bangladesh. In today's Bangladesh, women's empowerment is experiencing a significant surge. Women are working in almost all sectors of the state. They contribute significantly to social, political, economic, national, and international development. What are the main factors affecting this change? Does household technology play any role in women's lives at present? Are there any challenges to using household technologies and their impact on women's lives? Knowing the

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answers to those questions is necessary, especially for sociologists and policymakers, to help empower them and contribute more to the state.

1.2. Objectives of the study

Mainly, this study is an attempt to investigate the impact of household technologies on women's lives in the urban areas of Bangladesh. The study also aims to (1) study the present condition of household technology uses in the urban areas households in present-day Bangladesh. (2) analyze the role of household appliances towards empowering women in contemporary Bangladesh and (3) find out the challenges of household technologies on women's lives and offer recommendations for addressing those challenges within the context of Bangladesh.

1.3 Scope and limitation of the study

The study was conducted using a sample survey in metropolitan Dhaka, Bangladesh. However, due to the researcher's time constraints, scope limitations, and challenges, the survey could have also been conducted in other urban areas of Bangladesh. People living in other urban areas of Bangladesh may have different views and opinions about using household technologies and their impact on their daily lives. The study couldn't compare rural and urban areas of Bangladesh because it couldn't tell the two views apart. Moreover, the study emphasizes the sociological interpretation of the role of household technologies in women's lives more than other elucidations. Thus, the study aims to illustrate the social changes in women's lives due to the use of household technologies in contemporary Bangladesh. Therefore, future studies can be expanded to include both rural and urban areas, broadening the scope to enhance its impact, particularly for the nation and the world at large.

1.4 Methodology of the study

This study employed both qualitative and quantitative methods. The descriptive approach provided a comprehensive understanding of the theory from various perspectives and a critical evaluation. As with any analytical study, the thesis statement encapsulated the core arguments within the research framework, ensuring that accurate conclusions were drawn from references and collected data. Finally, this research accounted for the analytical nature of the available materials. As a fact, the study relies mainly on two types of sources: (1) library sources, e.g., books, journals, theses, seminar and conference materials, newspapers, magazines, Internet sources, etc., and most importantly, (2) field surveys. A self-administered questionnaire was prepared to conduct a sample survey to obtain data from many respondents living in Dhaka metropolitan city, Bangladesh. 100 questionnaires were distributed to the households to obtain those respondents' views. The study used a purposive sampling method that included people of almost all economic and social levels. The fieldwork for data collection started in December 2014 and ended in January 2015. It was difficult for the researcher to survey since there was no financial support from any person or institution. The collected data were carefully examined and evaluated through thorough investigation. Finally, SPSS software was utilized to compute, score, code, analyze, and present the findings statistically, ensuring readers' clarity and ease of understanding.

1.5 Sampling and measurement of the study

The researcher in Dhaka, Bangladesh, conducted the survey. The households were selected purposively; thus 100 questionnaires were distributed to the households, and a total of 32 duly filled-up questionnaires were returned. Those data were analyzed carefully using mechanized tabulation, showing household technologies' impact on women's lives.

1.6 Justification of the study

To the best of the researcher's knowledge, no academic work has been done on the impact of household technology on women's lives in urban areas of Bangladesh. Since it is a significant issue in contemporary Bangladesh, the researcher is convinced that the study is justifiable.

2. Literature review

The impact of household technologies on women's lives in Bangladesh has not received much academic attention, although it plays a significant role in present-day Bangladesh. Technology has a beneficial role in changing the lifestyle of the Bangladeshi people. However, very few studies have been conducted on this issue. The number of existing studies is limited, as are their scope, methodology, and the period they cover. Despite the scarcity of literature, some studies from other countries are partially relevant to the present research. Some of that work deals with the increasing number of women in the labor force due to technological development. For example, Greenwood, Seshadri, and Yorukoglu (2005) (hereafter referred to as GSY) argue that the widespread adoption of home appliances, such as washing machines and freezers, played a crucial role in reducing women's household responsibilities and facilitating their entry into the workforce. According to GSY, this adoption was driven by a rapid acceleration in technological advancements within the home durable goods sector, leading to a decline in the quality-adjusted relative price of home appliances. In addition to the liberation hypothesis, some other hypothesizes should be mentioned here, such as Fernandez, Fogli, and Olivetti's (2004) "The indirect effect of WWII on men's attitudes toward working women," Smith and Ward's (1985) and Jones, Manuelli, and McGrattan's (2003); Gayle and Golan's (2006) "the reduction in the gender wage gap".

Albanesi and Olivetti (2007) also proposed a modified version of the liberation hypothesis, highlighting the role of medical advancements and the introduction of infant formula as key factors that allowed married women to enhance their participation in the workforce.

Goldin (1990) provides a detailed historical account of women's experience in the labor market. Dinkelman (2008) considers the employment effects of household electrification in rural South Africa in the late 1990s. She uses a community's land gradient as an instrument for its treatment status and finds a positive effect of electrification on female employment.

Sociologists have also examined the connection between household technology and women's time allocation to housework, occasionally arriving at conclusions that differ from those of GSY. For instance, Cowan (1983) explores the relationship between household technology and women's housework over the past two centuries in the U.S. and argues that the time spent on housework by the average American woman in 1965 is comparable in magnitude to that at the beginning of the twentieth century (see: Cowan, 1983, p. 199). Others developed these ideas, arguing that rising standards of cleanliness, greater output, fewer servants, the extra transport involved in consuming substitutes, and the addition of new tasks had all combined to neutralize any time saving delivered by the new domestic machines (Cowan 1985; Wajcman 1991).

Ruth Schwartz Cowan (2008 see: <http://www.jstor.org>) argues in his "The Industrial Revolution in the Home: Household Technology and Social Change in the 20th Century" that technologies have contributed a lot to changing women's status in the modern era. Due to the technological revolution, many women have taken on jobs other than those at home.

Traditionally, the relationship between technology and society has been studied within the context of a technological revolution in industry, including automated factories, large business computers, and similar innovations. Over time, households have entered a comparable

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technological race. This technological revolution impacts daily life within the household, influencing time allocation patterns, the choice of social roles, the transmission of cultural values, and overall human behavior (Cowan 1976; Vanek 1978; Robinson 1980).

Most technologies impact individuals at two levels: the work environment and the home environment (Ginzberg 1965). In many instances, a technology begins with an industrial application and is later adapted for use in the home environment. The effect of such technological advancements can be significant. According to existing sociological literature, individual socialization occurs through interactions within major cultural institutions, such as families, schools, churches, and workplaces (Duncan, Featherman, and Duncan, 1972).

To conclude, it can be mentioned that no specific work has been done on the impact of household technologies on women in urban areas of Bangladesh. Moreover, some works partially related to the sociological interpretation of the role of technology in women's lives have been conducted in other countries, such as the U.S., U.K., Canada, and so on. Those works have helped utilize their model, hypothesis, or framework to conduct the preset survey and analyze the data gained from fieldwork. However, the present study emphasizes the sociological interpretation of the impact of household technologies on women's lives in the urban area of Bangladesh based on a survey conducted in Dhaka Metropolitan City. The study, therefore, would be a model for researchers, academics, students, readers, policymakers, and others.

3. Findings and analysis

Technology is beneficial in changing the lifestyle of both men and women in this modern world. In this era, no one can even think to lead a life without the influence of science and technology. Consequently, household technologies affect women's lives and change their personal, family, social, economic, political, and religious lives. Household technologies impact women in both positive and negative ways. The present study, based on a sample survey conducted in urban areas, finds the present condition of household technology' use and its role in changing women's lives.

A self-administered questionnaire was prepared to conduct the survey. Besides demographic information for the respondents, there are four parts to the questionnaire. The first part was related to the present condition of the uses of household technologies, and there were 18 variables. The second part of the questionnaire consists of 8 questions related to positive attitudes towards the impact of household technologies on women's lives. The third part of the questionnaire consists of 8 statements related to negative attitudes. Finally, the last part of the questionnaire is linked to other comments of respondents on the impact of household technologies on women's lives in urban areas of Bangladesh.

In most questions, the respondents were asked to comment on their views as 'yes,' 'no,' and 'no comment'. Finally, the respondents' views were coded to 'yes' as 1, 'no comment' as 2, and 'no' as 3.

The study then analyzed all the comments critically to present their views on household technologies' impact on urban women's lives. Typically, a statistical presentation displays the findings. Therefore, the study used SPSS software to compute, analyze, and describe the relationship between two variables through various statistical tests.

3.1 Uses of household technologies in the urban areas of Bangladesh

The current study primarily shows the present condition of household technologies used in Bangladesh's urban areas. Therefore, the respondents were asked 18 questions related to it, thus found the following results:

The responses' views are shown in the following charts:

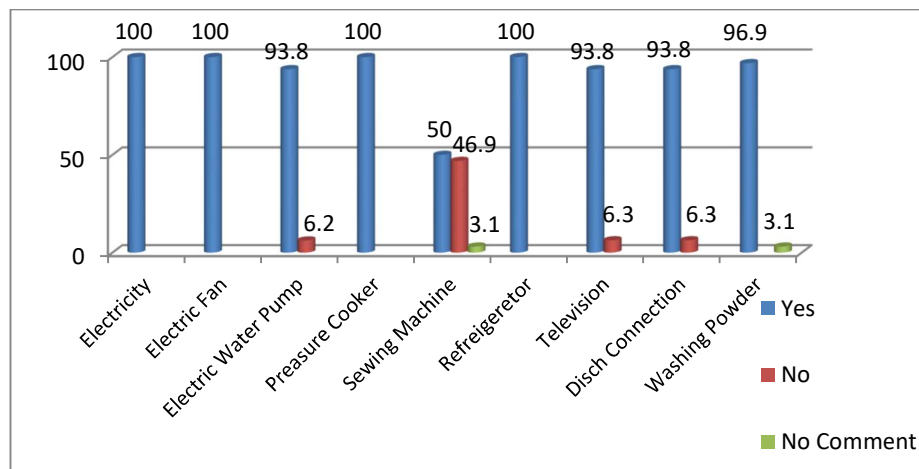


Figure 3.1a Uses of Modern Household Technologies in Urban Areas

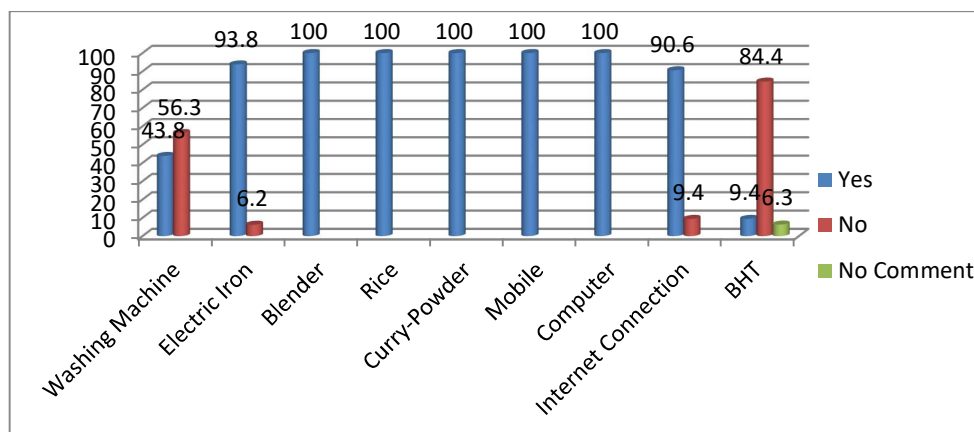


Figure 3.1b Uses of Modern Household Technologies in Urban Areas

Thus, the study computed all scores to one and changed all the scores accordingly to:

- 20-33 = 1 (Yes/Agree)
- 34-46 = 2 (No Comment/Not stated)
- 47-60 = 3 (No/ Disagree)

Therefore, the frequencies are shown in the figure:

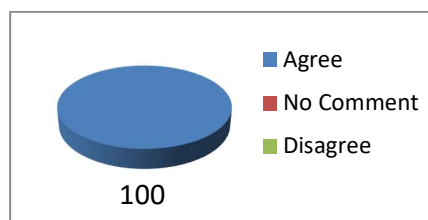


Figure 3.2 Uses of Household Technologies in Urban Areas of Bangladesh

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The above charts and figures indicate that every household uses household technologies in the urban areas of Bangladesh. However, anyone can see some variables that the respondents did not use. This is not due to a lack of technology but rather to the economic circumstances of the respondents. These items are expensive for them in the context of present-day Bangladesh.

Therefore, the study can claim that household technologies are available in urban areas and used frequently in present-day Bangladesh houses. Since women use these technologies in their homes, it significantly impacts their daily lives.

3.2 Positive impacts of household technologies

The preceding discussion showed that 100% of women are using modern household technologies in their lives. Since all households use these appliances in their houses, it should have either a good or bad impact on women's lives. Therefore, the study tried to know the respondents' views on the positive impact of modern household technologies on urban women's lives.

To know the opinion in this regard, the respondents were asked 8 questions thus, the frequencies are as follows:

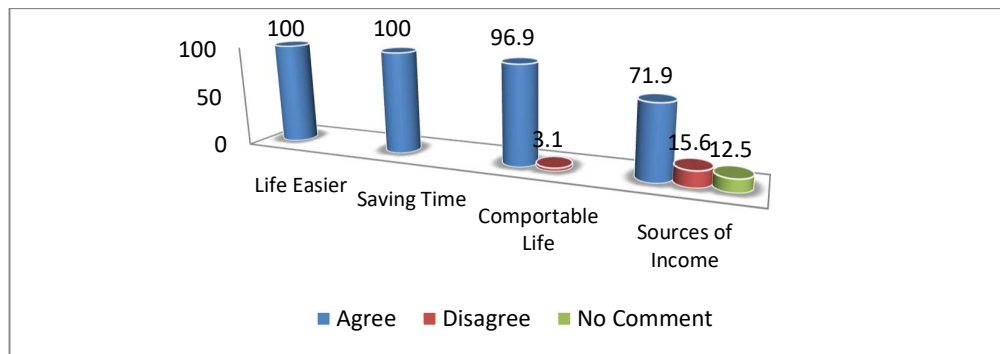


Figure 3.3a Positive Attitude towards Impact of Household Technologies

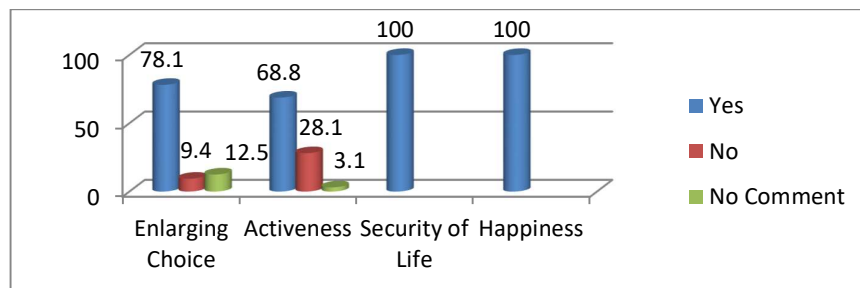


Figure 3.3b Positive Attitude Towards Impact of Household Technologies

Figure 3.2 shows the positive attitude of urban women toward the impact of modern household technologies in present-day Bangladesh. According to those statements, the study finds the following results:

a) Easy life

The study finds that household technologies make women's lives easier and more flexible in the urban areas of Bangladesh. They can do their household work efficiently by using technology. For example, they can cook rice in a pressure cooker rather than the traditional style. A pressure cooker reduces the risk of scorching the rice during cooking. It has some other options like timing and a warm-up system.

b) Saving time

Almost all respondents agreed that modern household technologies save time for their jobs. In the traditional ways, they need more time to complete their daily work at the house. On the other hand, using modern household technologies, they can complete their work more quickly than traditional styles. For example, using modern technologies, they do not need to prepare spicy curry at their houses since they are available at the nearest market and ready to cook.

c) Comfortable life

Household technologies also help urban women feel more at ease. In the past, cleaning clothes was a challenging task. On the other hand, using a washing machine saves time and energy and makes it comfortable, for example.

d) Creating the sources of income

Figure 3.2 shows that 71.9% of respondents agreed that household technologies create many sources of income for women in urban areas of Bangladesh. Many women are involved in small businesses in the urban areas of Bangladesh. The development of household technologies helps them to do this. However, 15.6% of women did not agree with this statement.

e) Enlarging choice

Enlarging choice is a sign of human development. The survey asked the respondents about expanding their choices. The women were asked if household technologies helped them to develop their choices. To reply to the question, 78.1% of respondents commented on it as “yes.” It proves that household technologies help urban women expand their choices in contemporary Bangladesh.

f) Activeness

The next concern about women’s positive attitude towards household technologies was to learn their opinions on activeness. So, respondents were asked if they were active while using modern technology for household chores. 68.8% of respondents agreed, and 28.1% disagreed with the statements. Therefore, they were also asked how they are becoming more active in their personal life. The reply was that household technologies save their time and make their lives easier; thus, they get more time to use in more productive work to earn money and to contribute to society, which brings honor, respect, and distinction to their personal, social, and national lives.

g) Security of life

Household technologies make women’s lives safer in urban Bangladesh. A lot of examples are there of how these appliances help to secure women’s lives. Automatic lock doors, development of communication, etc., play a good role in ensuring women’s lives. To know the respondents’ opinions, they were asked to comment on one statement related to this; thus, 100% of respondents agreed with that.

h) Happy and enjoyable life

Modern household technologies play a significant role in enhancing the happiness and enjoyment of women’s lives. Figure 3.3b shows that all the respondents agreed that household technologies make their lives happy and enjoyable. In Bangladesh’s urban areas, people use a variety of entertaining appliances. It also makes them happy, and they can enjoy it since they have sufficient time. Other work is now easier than in traditional styles of household work.

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Finally, the study computed all eight statements and coded them to the following:

- 8-13 = 1 (Yes/Agree)
- 14-19 = 2 (No Comment/Not stated)
- 20-24 = 3 (No/ Disagree)

Therefore, the results are shown in the following figure:

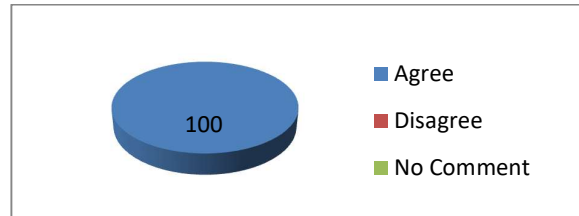


Figure 3.4 Positive Attitudes towards Household Technologies

Thus, it can be said that the respondents viewed that household technologies have a good impact on women's lives in the urban areas of Bangladesh. They consist of 100%.

3.3 Negative attitudes towards impact of household technologies

Besides positive attitudes towards the impact of household technologies on women's lives in urban areas of Bangladesh, there were some negative statements in the questionnaire to know their negative views. The respondents were asked to comment on eight statements. Thus, the frequencies were as follows:

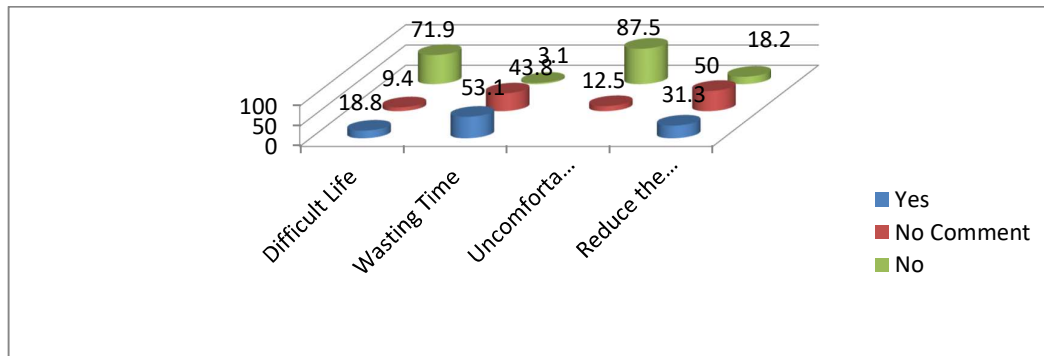


Figure 3.5a Negative Attitudes Towards Impact of Household Technologies

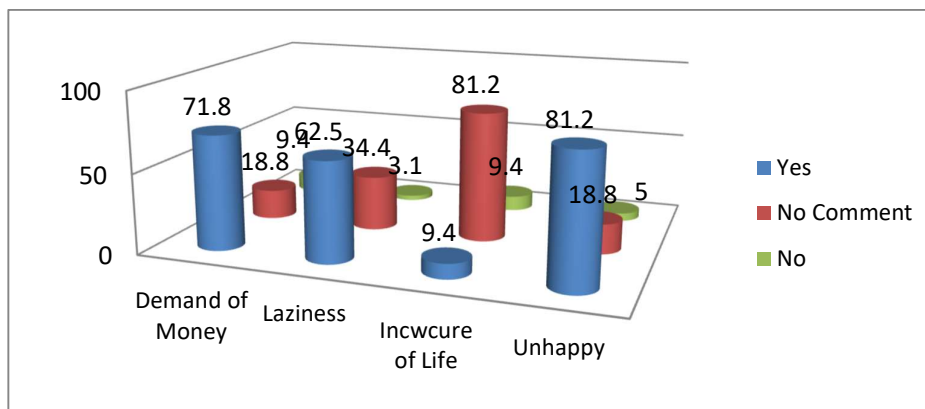


Figure 3.5b Negative Attitudes Towards Impact of Household Technologies

Figure 3.5a shows that 18.8% of respondents agreed that household technologies make our lives more difficult. However, 71.9% of respondents strongly disagreed with that statement, and 9.4% of respondents did not make any comment. The result proves that most respondents viewed household technologies as having a more positive role than a negative role in women's lives in the rural area of Bangladesh.

The figure also shows that 53.1% of respondents believe that modern household technologies play a good role in wasting valuable time. 43.8% of respondents, however, said that household technologies do not waste women's time in urban Bangladesh.

Moreover, 87.5% of respondents doubted that household technologies make women's lives uncomfortable rather than comfortable. However, 12.5% of respondents did not comment on the statement.

The study also found that 31.3% of respondents viewed household technologies as reducing their sources of income. However, 50.0% of respondents did not agree with that statement. They believed that it generated new sources of income rather than diminishing them. Again, 18.8% of respondents did not make any comment.

It is found that modern household technologies increase the demand for money because the price of those appliances is high and sometimes out of their capacity. So, expecting to use those appliances creates a need for money, which could lead to wrongdoing. The survey revealed that 71.9% of respondents concurred with that statement. On the other hand, only 9.4% of respondents disagreed, and 18.8% of respondents did not make any comment.

Amusingly, the study finds that using modern household technologies leads women to be lazy. Since they can complete their household work quickly using modern appliances, they would rather not do work. Therefore, sometimes, it causes one to be lazy. According to the survey, 62.5% of respondents believed that household technologies contribute to women's laziness.

Likewise, 81.3% of respondents disagreed with the statement that household technologies lead women's lives to be insecure. This means that technology secures women's lives in rural areas of Bangladesh. However, 9.4% of respondents agreed, and 9.4% did not agree with the statement.

Finally, 81.3% of respondents stated that household technologies do not make women's lives unhappy rather than happy. However, 18.8% of respondents did not comment on the statement.

Thus, the study computed all variables related to negative attitudes towards the impact of household technologies on women's lives to one and coded as follows:

8-13	=	1 (Yes/Agree)
14-19	=	2 (No Comment/Not stated)
20-24	=	3 (No/ Disagree)

The study finds the following results:

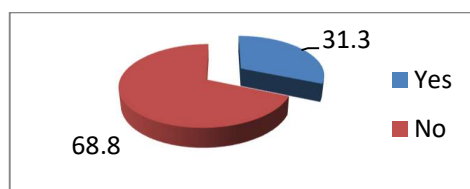


Figure 3.6 Negative Attitudes towards Impact of Household Technologies on Women's life

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It should be noted that many respondents negatively viewed the impact of household technologies on women's lives in the urban areas of Bangladesh. They consist of one-third of the total respondents. However, two-thirds of respondents said that household technologies have a good rather than a bad impact on Bangladeshi women's lives. The negative views may have some reasons that could be studied in future research.

3.4 Challenges

In the above discussions, the condition of household technologies and the positive and negative attitudes towards them have been shown based on data collected from a sample survey conducted in Dhaka. This chapter will state some of the challenges of household technologies and make recommendations to overcome those challenges in Bangladesh. There are many challenges to the impact of household technologies on women's lives in the urban areas of Bangladesh. Among them, a few are as follows:

a) Enlarging desires and expectations

The primary challenge of modern household technologies is the expansion of women's desires and expectations. In the urban areas, life is very complicated due to the state's economic condition. People are struggling to survive their lives. There is no balance between income and expenditure. The price of daily goods is increasing daily, but income is not increasing accordingly. In this situation, women's desires and expectations could potentially lead to undesirable outcomes. It could even make life hell.

b) Demand of money

Anyone who wants to use modern household technologies needs more money. According to the country's GDP rate, a few people are in such a condition that they can fulfill their desires. Most people are not in that position. In that condition, people may lead their lives on the wrong path to increase their income sources. For instance, corruption led to the arrest and imprisonment of numerous individuals during the second caretaker government of Bangladesh a few years ago. They revealed the reason behind their corruption and income from illegal ways. One of those reasons was their wives' demand for money. Therefore, it could destroy our joyful life.

c) Losing the traditional culture

Because of the development of science and technology, people depend on machines. Women in rural and urban Bangladesh areas are increasingly relying on machines, similar to global trends. They are going to forget their traditional culture and their culture. It causes our personal and social relationships and loss of feelings and emotions. Nowadays, it is rare to see some women preparing a traditional cake on some occasions. The loss of this kind of Bengali culture may lead to the breaking of our good relationship.

d) Apparatus life

The machine has some demerits since it works through chemicals or power, like electricity or other things. Occasionally, it is harmful to life. Generally, working with or using household technologies can be extremely risky. The development of household technologies, of course, makes our lives easier, but at the same time, it makes us dependent on the machine.

e) Physical and medical problems (diseases)

Technologies can have physical and medical side effects, including cancer and death. For example, research indicates that the magnetic vibration of a mobile tower causes cancer. Therefore, we should limit our exposure to mobile towers.

4. Conclusion and recommendations

We are living in the era of science and technology. We cannot avoid it in any aspect of our lives. Technology has become a part of our lives. At the house, we use many technological appliances. Those household technologies have both merits and demerits. However, the merits are more influential than the demerits. The present study emphasizes the impact of household technologies on women's lives in the urban areas of Bangladesh. The study is based on a sample survey conducted in Dhaka, a metropolitan city. A self-demonstrated questionnaire was prepared for the survey, and many households were the study's respondents. The study finds that all households are equipped with using modern household technologies. It also highlights the impact of this technology on women's lives positively and negatively. Even though modern household technologies have some negative consequences, the positive effect is more influential and significant. This study also finds the challenges of household technologies' uses on urban women's lives; thus, it suggests some recommendations to overcome them. There are many things we can do to overcome the challenges of the impact of modern household technologies on women's lives in contemporary Bangladesh. Among them, a few are as follows:

1. First of all, we should be careful about our desires and expectations. It should not be out of our capacity.
2. Secondly, we should be careful about our income and expenditure. We can never forget the phrase: "Cut your cloth according to your cloth." Therefore, it will never lead us to the wrong path.
3. We should preserve our culture and our legendry. It's our pride that we have some exceptional cultures and customs. It plays a good role in enhancing our relationship.
4. We should always be careful to use household appliances. Otherwise, it can be a cause even to death.

Finally, we should try to develop household technologies that are not harmful to our health and environment.

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