Housewife's Awareness of Global Climate Changes and its Relationship with Behavioral Practices Associated with Some Resources in the Home Environment

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Abstract: The present research mainly aims at studying housewife's awareness of global climate changes and its relationship with behavioral practices associated with some resources in the home environment. The **research tools** included the Family General Data Form (FGDF), Global Climate Changes Awareness Questionnaire (GCCAQ) (information and knowledge - attitudes), and Behavioral Practices Associated with Some Resources in the Home Environment Questionnaire (BPQ) (power and house appliances resource- water resource- house wastes resource- house decorative plants resource). The research tools were applied to a purposeful intentional sample consisting of 344 housewives having one son/ daughter at least not less than five years old from the working and non-working housewives both rural and urban in Menoufia Governorate and from different socio-economic levels. The **study findings** showed that there are statistically significant differences between the average scores of the rural and urban housewives in the global climate changes awareness in favour of the urban housewives at significant level 0.001 whereas there are no statistically significant differences between the rural and urban housewives in the overall behavioral practices associated with some resources in the home environment, but there are statistically significant differences in some aspects of the (BPQ) which are the behavioral practices associated with the water resource in favour of the rural housewives at significant level 0.001 and in house wastes resource and house decorative plants resource in favour of the urban housewives at significant level 0.01 and 0.001 respectively. There are statistically significant differences between the average scores of the working housewives and the non-working housewives in both global climate changes awareness and behavioral practices associated with some resources in the home environment in all its aspects in favour of the working housewives at significant level 0.001. There is also a negative statistically significant relationship between the housewife's age, the marriage years and the family size and both global climate changes awareness and behavioral practices associated with some resources in the home environment at significant level 0.01 whereas there is a positive statistically significant relationship between the education level of the husband and wife and the family income and both climate changes awareness and behavioral practices associated with some resources in the home environment at significant level 0.01. There is positive statistically significant relationship between the climate changes awareness and behavioral practices associated with some resources in the home environment with all its aspects at significant level 0.01. The results also showed the difference in percentage the independent variables (the housewife's awareness of global climate changes and some socio-economic level variables) contribute to the explanation of the dependent variable occurrence (housewife's behavioral practices associated with some resources in the home environment). The global climate changes is considered one of the most important variables affecting the housewife's behavioral practices associated with some resources in the home environment in addition to the housing environment, housewife's work, her age, family size and family income. The most important **recommendations** include intensification of program presentation that aim at making the housewife's aware of global climate changes through holding forums, lectures or through all the aural, readable and visual information media stressing the importance of using an easy, simplified style avoiding the specialized scientific terminology so that the housewife can understand the issue and take part in avoiding or decreasing its occurrence and solving it and making her family members aware of the importance of environment and its safeguarding.

1. Introduction

The climate change has become a global phenomenon that requires gathering all human powers and international expertise to face the effects of a possible environmental catastrophe endangering the fate of humanity. The climate change phenomenon is characterized from most environmental problems by being global in nature since it has crossed borders of countries to pose danger to the whole world (IPCC, 2007). The attitude towards developing industry in the

past 150 years led to digging and burning millions of tons of fossil fuel to generate power. Such kinds of fossil resources (coal- oil- natural gas) released gases that trapped heat inside the atmosphere which is one of the most important causes of climate change since carbon dioxide concentration increased in the atmosphere—it is one of the most important gases contributing to climate change—from 278 part of million to 379 part of million in 2005 (El-Raey *et al.,* 2007). These gases increased the planet temperature by 1.2 degree Celsius compared to the levels that preceded the industrial revolution. The international governmental team expects more increase in temperature from 1 to 3.5 degree by the year 2100 in comparison to 1990 (IPCC, 2007). This means that humanity expects catastrophic results affecting environment and natural life of man, animal and plants and, of course, the economy of all countries.

The International Panel for Climate Change (IPCC) stated that this continuous rise in the global average temperature will lead to many serious problems such as the rise of the sea level threatening with submerging some areas in the world, affecting the water resources and yield, spreading some infectious diseases to an epidemic extent due to evacuation of population and decrease in the production of food, water and power due to climate changes (IPPC, 2001). According to estimates of the World Health Organization, the climate changes that happened in 2000 led to the death of 150,000 people and the migration of 25 million people (WHO, 2002). It is also expected that political clashes and struggles will take place during 2010-2030 due to drought and search for water prevailing some countries and the change of world political map after the disappearance of some islands (Al-Deek, 2009).

This situation led the international efforts a long time ago to pay attention to deal with some climate changes most importantly reducing the release of global warming gases including (carbon dioxide, methane, nitrous dioxide gases, hydroflorocarbons, biroflorocarbons and sulphur fluoride 6) which are the result of human activities of industrial development, agricultural extension, removing forests and change in the use of land (General Information Authority, 2001).

It is ironical that developing countries that bear less responsibility for climate change will suffer its worst results because they do not have enough resources necessary for dealing with this change. An official report about the environmental condition issued in Egypt has warned against the negative results .Egypt may suffer due to the climate change stressing that agriculture will be the first sector affected by this change (Eid *et al.,* 2006). The report issued by Ministry of Environmental Affairs stated that there are two imminent sources of danger due to climate change expected to happen in the future on earth. First, the

River Nile may lose about 30-60% of its water resources due to the change in the amount of water quantities in the river source, which may lead to tremendous decrease in agricultural production. Second, the rain-dependent agriculture in North Africa will decrease by 50%, stressing that the tourism sector will be the second sector to be affected by the climate change. As for the Egyptian delta area, the report stressed that studies conducted by the UN Environment Program in Alexandria University show that the rise of the sea level will lead to the overflow of large part of the delta, especially the parts that are below the sea level. The report also showed that there is another possibility that the sea water may leak below the delta soil surface causing it to become salty. This means the loss of parts of the best soil in Egypt and evacuation of millions of its residents. The report warned against the danger of climate change on man's health and life, pointing out that the matter may include the spread of diseases that did not exist in Egypt due to the movement of insect-carrying diseases from the south to the north of the continent (Ministry of Environmental Affairs, 2008).

In this light, the World Health Organization classified countries into groups according to annual death rate due to climate change. Egypt was the worst in the third group out of four groups in 2000 with death rate due to climate change 40-80 cases per million annually (WHO, 2002). Despite the seriousness of the climate change problem and its global nature, it is the result of our behavior whether individual or collective. Whatever the individual does in his small and direct environment, the house, of positive or negative practices they are the outcome of his thought, education and culture-- the results of which whether good or harmful reach the neighborhood, then the country and finally the world at large (El-Khouly, 2002).

Environmental pollution is not due to the technological progress only but also due to human activities that disregard the requirements of safeguarding the environment (Arnaut, 2002). Kahan and Freidman (1988) stressed that the environmental pollution problem worsening and its huge size at present is closely related to the patterns of behavior towards the environment and that individuals' awareness of them plays an important role in supporting the issue of environmental pollution. Abdullah (2005) stresses the importance of developing awareness of environmental problems and that awareness represents the first and simplest levels of environmental attitudes for the individual that determine his expected behavior towards the environment.

Lack of awareness of environmental problems was one of the most important causes of environmental pollution (Eissa, 2002). Therefore, facing the

environmental pollution problems requires changing the behavior of individuals and groups lessen the gravity of these problems and realize the nature of the relationship between man and his environment, that is, to develop environmental awareness towards safeguarding the environment against pollution (Al-Halaby, 1997). Since home environment is the microenvironment of the society environment, wise dealing and correct behavioral practices when using the home environment resources by the housewife-- based on the realization of the environmental pollution problem and climate change and its effect on both local and international levels-- may be an important step to limit this problem. Home environment is the starting point to face the problem on the national and international levels.

Abdel Salam and Abdel Murdy (2005) state that pollution in home environment is due to low environmental awareness in dealing wisely by the family members with home environment resources. The annual report of UN Population Fund stressed on the importance of the population aspect in the climate change problem and integrating woman in the facing plans whether by making her aware of rational environmental behaviors or by developing her abilities (Bashir, 2012). The woman should have an active role and participate instead of being a bystander in facing the climate change that poses imminent threat.

The role of woman is important in limiting the causes of climate change phenomenon (emission of global warming gases) since her main role is managing the family needs inside the house and dealing with most natural resources in addition to being an example for her children in dealing with these resources and her interest in the indicators that paint the picture of the near and far future (Ministry of Environmental Affairs, 2008).

The Fifth International Conference for Development and Environment in the Arab Nation (2010) recommended the importance of the role played by woman in the environmental system because of its productive result in dealing with the environmental problems in addition to adopting the aspect of rural woman's contribution to environmental field. Abdel Hamid (1992) referred to the basic role played by woman in polluting or not polluting the environment.

This role is evident in the outstanding social position occupied by woman in our first environment, the home, since woman is in most cases is the one who manages the home economic affairs through her dealing with the resources available in home environment. Once woman becomes aware the importance and limitedness of these sources, this will be important in limiting the drain of environmental resources or increasing wastes in the environment. The housewife now uses new kinds of modern materials and one-time usable products such as paper towels foils and plastic products such as plates and forks which increases the size of waste and in turn the size of climate change problem.

If the housewife is responsible for the limit of resource (such as power and water) drain, she has also an educational role to play which is directing her children to rationalize resources such as following the right way of dealing with household waste and how to make use of it, which may have direct and indirect effect of their dealing with the environment. Therefore, raising the housewife's awareness of global climate change may be the basic approach to eco-friendly practices when using the home environment resources.

Mainieri *et al.* (1997) stressed that there is a positive correlation between concern about the environment and the individual's consumptive behavior. El-Zaki and Ibrahim (2005) referred to the presence of a positive correlation between awareness of safeguarding the home environment from pollution and the housewife's consumptive behavior. Qabani (2007) concluded a positive correlation between environmental awareness for the University City students and the environmental behavioral practices.

In addition, the housewife's educational and cultural level may be one of the variables that determine the level of her environmental awareness (Kreitler, 1998). Helmi (1998) stressed that there is no difference in environmental awareness for the housewives, whether educated or not.

This resulted in the idea of the present study to answer the following question: is there a relationship between the housewives' awareness of global climate changes and their behavioral practices associated with some resources in the home environment.

Objectives of Study:
The major objective of study is revealing the relationship between housewife's awareness of global climate changes and her behavioral practices associated with some resources in the home environment through the following minor objectives:
1- Determining the level of both the awareness of global climate changes and behavioral practices associated with some resources in the home environment for the housewives sample of study.
2- Identifying the relative importance of information sources for the housewives sample of study about global climate changes and their views about their role in these changes and means of protection, their suggestions for means of protection and views about the government's role in providing protection against these changes.
3- Studying the differences between the rural and urban housewives in both awareness of global climate changes and behavioral practices associated with some resources in the home environment.

4- Studying the differences between the working and non-working housewives in both awareness of global climate changes and behavioral practices associated with some resources in the home environment.

5- Revealing the relationship between some variables of the family's socioeconomic level (housewife's age-number of marriage years-family size-income level- husband's educational level- wife's educational level) and both the awareness of global climate changes and behavioral practices associated with some resources in the home environment for the housewives.

6- Studying the relationship between housewife's awareness of global climate changes and her behavioral practices associated with some resources in the home environment.

7- Determining the percent of contribution of the independent variables (the housewife's awareness of global climate changes and some socio-economic level variables) to the explanation of the dependent variable occurrence (housewife's behavioral practices associated with some resources in the home environment).

Importance of Study:

The present study is important for the following reasons:

1- Shedding light on one of the most important local and global problems that has drawn attention recently to know its important causes and repercussions and the role of being aware of it in affecting housewife's behavioral practices associated with some resources in the home environment to limit the dangers caused by faulty behavioral practices inside the home environment on the local and global ecosystem.

2- Determining the level of both the awareness of global climate changes in the study sample in order to help the decision makers in setting suitable protective programs to reduce the dangers of this problem that impede development plans and reduce its negative effects on both the local and global levels.

3- The results of this study will help in forming positive attitudes for the housewife towards rational behavioral practices that should be followed inside the home to limit the problem of global climate changes.

4- The results of this study will help specialists in the field of home management in identifying the role of global climate changes for the housewife in affecting on behavioral practices associated with some resources in the home environment. Thus, the study is a start for other studies on climate changes and their relationship with resources management inside the home sector.

Research Procedures:

First: The Study Hypotheses:

1- There are no statistically significant differences between the average scores of the rural housewives and urban housewives in both the awareness of global climate changes and behavioral practices associated with some resources in the home environment.

2- There are no statistically significant differences between the average scores of the working housewives and non-working housewives in both the awareness of global climate changes and behavioral practices associated with some resources in the home environment.

3- There is a statistically significant relationship between some variables of the socio-economic level of the family (housewife's age- number of marriage years- family size- income level- husband's educational level- wife's educational level) and both the awareness of global climate changes and behavioral practices associated with some resources in the home environment.

4- There is a statistically significant relationship between the housewife's awareness of global climate changes and behavioral practices associated with some resources in the home environment.

5- The percent of independent variables contribution (the housewife's awareness of global climate changes and some socio-economic level variables) to the explanation of the dependent variable occurrence (housewife's behavioral practices associated with some resources in the home environment) according to the weight of regression coefficients and degrees of correlation to the dependent variable.

Second: The Study Procedural Terminology:

Awareness

Awareness is the process of values and conceptions formation necessary for understanding and evaluation. It is an intellectual and emotional process that includes both the cognitive and emotional aspects; the cognitive aspect comes in the first place but it is not purely cognitive as it falls in the emotional aspect (Samaan, 2002). Awareness is procedurally defined as the housewife's realization of a situation, problem or a certain topic and her knowledge and attitudes towards that situation, problem or a certain topic.

Climate Change

According to UNFCCC (1992), climate change is the change in climate caused directly or indirectly by human activity resulting in a change in the components of the earth's atmosphere.

Climate change is any affective and long-term change in the climate rate in a certain region which includes temperature rate, rain rate and wind condition. These changes can be caused by the dynamic processes

of the earth such as earthquakes, volcano and huge meteors fall. It is caused recently caused by the human activities (http://en.wikipedia.org). International Panel for Climate Change (IPCC) (2007) state that it is a change in climate in the course of time whether due to natural changes or human activity. Climate change is the sudden and huge increase in the rates of environmental and climate changes caused by humans as a result of industrial and technological progress and other activities (Yussry, 2008).

Climate Change Awareness

It refers to the person's realization of global climate change in connection with his realization of the problem, its causes and repercussions, ways of solving it and forming positive attitudes towards this problem and having responsibility towards it.

Home Environment

It is the material surroundings of the family through which they satisfy their many needs by using their limited resources to achieve their wishful aims (El-Zaki and Ibrahim, 2005). It is also defined as the spatial room which the family inhabits and practice their various home and social activities and provides the family with life making (Ragheb and Badr, 2007). It is procedurally defined as the material surroundings in which the family inhabit and practice their different activities to satisfy their needs and achieve their aims by the using the available resources.

Home Environment Resources

They refer to anything the housewife possess inside the material surroundings in which the family live and they can use whether they are consumption resources such as (power and house appliances, water, house decorative plants) or recyclable material produced by consumption such as (household waste).

Behavioral Practices Associated with Some Resources in the Home Environment

These refer to the way adopted by the housewife when using some resources of the home environment whether positively to limit the problem of climate change or negatively to worsen this problem. These practices include the practices related to (power and house appliances, water, household waste, house decorative plants).

Third: The Method of Study:

The present study adopted the analytical descriptive method. It refers to the description of present characteristics and phenomena by collecting data through observation, meeting or tests and explaining these phenomena to determine the relationships between the variables and extract the generalizations and results (El-Rashidy, 2000).

Fourth: Limits of the Study:

Human Limitations:

The study was conducted on a purposeful intentional sample consisting of 344 housewives having

one son/ daughter at least not less than five years old from the working and non-working housewives from different socio-economic levels.

Geographical Limitations:

The researcher has chosen rural and urban Menoufia Governorate as a geographical scope for her study since Menoufia Governorate is the residence and work place of the researcher.

Time Limitations:

The application of the study and collection of data extended from the beginning of January 2012 to mid April 2012.

Fifth: Designing, Constructing and Limiting the Study Tools:

The study tools included:

1. Family General Data Form (FGDF) which was prepared to collect the basic data about the families' sample of study to serve the study objectives. It included the data of home environment (rural-urban), the housewife's age, number of marriage years, housewife's work (working- non-working), family size small (2:4 members) medium (5:6 members) large (more than 6 members), husband's and wife's educational levels which were divided into low (illiterate- reads and writes- primary school), intermediate (prep school- intermediate qualification- post-intermediate qualification) advanced (university qualification- post-university qualification). The form also included the family income according to three levels: low (less than 600 L.E., from 600 to less than 800 and from 800-1000) and mid (1000-1200, 1200-less than 1500, 1500 to less than 2000) and high level which includes (2000 L.E. or more).

2. Global Climate Changes Awareness Questionnaire (GCCAQ):

After reviewing the previous studies related to the subject of study, the researcher prepared an initial questionnaire about the awareness of global climate changes with an aim of identifying the levels of the housewife's awareness of global climate changes. The questionnaire was prepared in the light of procedural definition of awareness of global climate changes. In its initial stage, the questionnaire consists of (38) statements some of which positive and some are negative divided into two aspects:

*The First Aspect: The Housewife's Information and Knowledge about the Global Climate Change.

It included (19) statements that measure the housewife's Information and knowledge about the global climate changes, their causes, repercussions, methods of remedy and their results.

*The Second Aspect: **The Housewife's Attitudes towards the Global Climate Change.**

It included (19) statements that measure the housewife's attitudes towards the global climate

changes, whether positive or negative as well as her sense of responsibility towards that global problem and her readiness to take part in its solution. It also included (3) items to identify the housewife's most important sources of information about the global climate change (TV- radio- newspapers and magazines- the internet- friends and acquaintances), the housewives' responses about their role in effecting these changes and safeguarding the environment against them and their views about the contribution of the government in safeguarding the environment against global climate changes. To know the questionnaire validity of content, it was shown in its initial form to a group of judges (9 judges) from specialists in home and establishments management and ecology science. The judges agreed to the questionnaire statements by 90%-98% and the wording of some statements were modified in the light of the remarks made by the judges. Thus, the questionnaire is subject to the validity of content. The validity of internal consistency was calculated by calculating the coefficient between every aspect of the questionnaire and the total score of the questionnaire.

Table (1) the correlation coefficient between every aspect of the questionnaire and the total score of the questionnaire.

The Variables	The correlation coefficient	The significant level
The First Aspect: Information and Knowledge	0.945	0.01
The Second Aspect: Attitudes	0.962	0.01

It is clear from table (1) that the correlation coefficients ranged (0.945, 0.962) which are significant values at significant level 0.01 which shows the homogeneity of the aspects of the questionnaire of global climate change and the total score of the questionnaire. The reliability coefficient for the questionnaire was calculated by the Alpha-Cronbach method to calculate the reliability for the questionnaire as a whole reaching (0.917) —a high value that stresses homogeneity of the questionnaire to measure the awareness of global climate change.

Thus, the questionnaire in its final form includes (38) statements the response to which is determined according to three choices (agree- neutral- disagree) on a continuous scale (3-2-1) for the positive statements, (1-2-3) for the negative statements. Therefore, the highest score for respondents is (114) and the lowest is (38). The questionnaire scores were, thus, divided into three levels according to the level of awareness of global climate change: low level of awareness (from 38: less than 57 scores) lees than 50%, intermediate level (from 57: less than 91.2)

50%: less than 80%, high level (from 91.2: 114) 80% and more.

3. The Housewife's Behavioral Practices Questionnaire:

After reviewing the previous studies related to the subject of study, the researcher prepared an initial questionnaire about housewife's behavioral practices to identify the levels of housewife's behavioral practices associated with some resources inside the home environment. The questionnaire was prepared in the light of the procedural definition of housewife's behavioral practices. In its initial stage, the questionnaire consists of (38) statements some of which positive and some are negative divided into four aspects that deal with housewife's behavioral practices associated with some resources inside the home environment. These are:

The first aspect: Behavioral practices associated with power and house appliances resource:

This aspect included (20) statements some of which are positive and some are negative which measure the way adopted by the housewife when using the power and house appliances resource following eco-friendly or unfriendly practices, using renewable clean sources of power or non-renewable and harmful to the environment and rationalizing the use of the resource or its drain since it's the first and most important resource, the use of which affects the phenomenon of climate change.

The second aspect: Behavioral practices associated with water resource:

This aspect included (9) statements some of which are positive and some are negative which measure the way adopted by the housewife when using the water resource in connection with reusing, rationalizing, draining and keeping it.

The third aspect: Behavioral practices associated with household waste resource:

This aspect included (14) statements some of which are positive and some are negative which measure the way adopted by the housewife when dealing with the waste resource in connection with ways of getting rid of it following eco-friendly or unfriendly way or reusing it to produce new products and sorting this waste from the source to reduce it and informing children of this.

The fourth aspect: Behavioral practices associated with household decorative plants resource:

This aspect included (7) statements some of which are positive and some are negative which measure the way adopted by the housewife when using the household decorative plants resource in connection with her interest in having them at home, in the street and her participation to do this. It also includes the effort exerted to increase the green areas

and informing the family members of their importance in the problem of global climate change. To know the validity content of the questionnaire, it was shown in its initial form to a group of judges (9 judges) from specialists in home and establishments management. The judges agreed to the questionnaire statements by 95%-100% whereas the agreement decreased on three statements less than 80%, which were omitted. Some statements were modified in the light of the remarks made by the judges. Thus, the questionnaire is subject to the validity of content. The validity of internal consistency was calculated by calculating the coefficient between every aspect of the questionnaire and the total score of the questionnaire.

Table (2) the correlation coefficient between every aspect of the Housewife's Behavioral Practices questionnaire and the total score of the questionnaire

The Variables	The correlation coefficient	The significant level
Practices associated with power and house appliances resource	0.921	0.01
Practices associated with water resource	0.730	0.01
Practices associated with household waste resource	0.781	0.01
Practices associated with household decorative plants resource	0.835	0.01

From the previous table it is clear that the correlation coefficients ranged (0.730, 0.921) which are significant values at significant level 0.01 which shows the homogeneity of the aspects of the questionnaire of the housewife's behavioral practices associated with some home environment resources and the total score of the questionnaire. The reliability coefficient for the questionnaire was calculated by the Alpha-Cronbach method to calculate the reliability for the questionnaire as a whole reaching (0.818) —a high value that stresses homogeneity of the questionnaire of the housewife's behavioral practices associated with some home environment resources.

Thus, the questionnaire in its final form includes (47) statements the response to which is determined according to three choices (always- sometimes-rarely) on a continuous scale (3-2-1) for the positive statements, (1-2-3) for the negative statements. Therefore, the highest score for respondents is (114) and the lowest is (47). The questionnaire scores were, thus, divided into three levels: bad behavioral practices (from 47: less than 70.5 scores) less than 50%, fairly good behavioral practices (from70.5: less than 112.8 scores) 50%: less than 80% and good

behavioral practices (from 112.8: 141 scores) 80% or more.

Sixth: The Statistical Treatment:

After collecting and recording the data, the statistical treatment was done by using SPSS program and the following were calculated: frequencies, percentages, means, standard deviation for the study variables, Alpha-Cronbach and Pearson's coefficient for the validity content, T-Test to know the significance of differences between means, correlation coefficients of the study and the analysis of the multiple declination by step wise method.

3. Results and Discussion:
First: The descriptive results:
Table (3) **Relative distribution of the** study sample **according to** The Home Environment

The Variables	The Number	Percent
Rural	210	61%
Urban	134	39%

It is clear from table (3) that the Most of the study sample was rural housewives by 61%, whereas the percent of urban housewives was 39%.

Table (4) Relative distribution of the study sample according to the housewife's work

The Variables	The Number	Percent
Working	218	63.4%
Non-working	126	36.6%

63.4% of the study sample was working housewives, whereas the percent of non-working housewives was 36.6%.
Table (5) **Relative distribution of the** study sample **according to the housewife's age**

The Variables	The Number	Percent
From 20: less Than 30 Years	63	18.3%
From 30: less Than 40 Years	143	39%
From 40: less Than 50 Years	84	24.4%
50 Years or more	63	18.3%
Total	344	100%
Mean	2.43	

Table (6) Relative distribution of the study sample according to
The number of marriage years

The Variables	The Number	Percent
Less than 5Years	42	12.2%
From 5: less than 10 Years	84	24.4%
From 10: less than 15 Years	92	26.7%
From 15: less than 20 Years	21	6.1%
Years or more	105	30.5%
Total	344	100%
Mean	3.18	

It is clear from table (5) that the highest percent for the members of the study sample was for

the housewives in the age range 30: less than 40 that is 39% followed by the age range from 40: less than 50 that is 24.4% followed by the age range from 20: less than 30 and from 50 or more both reaching 18.3%.

It is clear from table (6) that the highest percent for the members of the study sample was for the housewives who were married for 20 years and more reaching 30.5% followed by 10: less than 15 reaching 26.7% followed by less than 5: less than 10 reaching 24.4% followed by less than 5 reaching 12.2% whereas the lowest percent for the members of the study sample was for the housewives who were married for 15: less than 20 reaching 6.1%.

Table (7) Relative distribution of the study sample according to the family size

The Variables	The Number	Percent
Small family (2:4 members)	147	42.7 %
Medium family (5:6 members)	155	45.1 %
Large family (more than 6 members)	42	12.2 %
Total	344	100%
Mean	1.69	

It is clear from table (7) that the highest percent for the members of the study sample was for the medium size families (from 5:6 members) reaching 45.1% followed by the small families (from 2:4 members) reaching 42.1% and finally the large families reaching 12.2%.

Table (8) Relative distribution of the study sample according to the husband and wife educational level

The Variables	Husband's educational		Wife's educational	
	The Number	Percent	The Number	Percent
Low educational level (illiterate- reads and writes- primary school)	63	18.3%	84	24.4%
Intermediate educational level (prep school- intermediate qualification- post-intermediate qualification)	84	24.4%	63	18.3%
Advanced educational level (university qualification- post-university qualification).	197	57.3%	197	57.3%
Total	344	100%	344	100%
Mean	2.39		2.33	

It is clear from table (8) that more than half of the study sample size was for housewives and family men who have high educational level (university qualification- post-graduate studies whether master or Ph. D.) reaching 57.3%, whereas 24.4% of family men have intermediate education (secondary qualification- intermediate institute) against 18.3% of housewives. The lowest percent for the family men was for the low educational level (illiterate- reads and writes- primary school- prep school) reaching 18.3% against 24.45 housewives of the same level. The study showed the educational level of both housewives and family men sample of study was near with the arithmetic mean of the family man 2.39 against 2.33 for the housewives.

Table (9) Relative distribution of the study sample According to family income levels

Income levels	The Variables	The Number	Percent
Low-Income level	(less than 600 L.E., from 600: less than 800, from 800: less than 1000)	84	24.4 %
Mid Income level	(from 1000: less than 1200, from 1200: less than 1500, from 1500: less than 2000)	147	42.7 %
High-Income level	(2000 or more)	113	32.8%
Total		344	100%
Mean	2.08		

From table (9) it is clear that the highest percent for the members of the study sample was for the families with mid income (from 1000: less than 1200, from 1200: less than 1500, from 1500: less than 2000) reaching 42.7% followed by high-income families (2000 or more) reaching 32.8% then low-income families (less than 600 L.E., from 600: less than 800, from 800: less than 1000) reaching 24.4%.

Table (10) Relative distribution of the study sample according to the source of their information about global climate change

The Order / Information Source	The First		The Second		The Third		The Fourth		The Fifth		The Total	
	The Number	Percent	The Number	Percent	The Number	Percent	The Number	Percent	The Number	Percent	The Number	Percent
TV	197	57.3	63	18.3	63	18.3	21	6.1	_	_	344	100
The radio	_	_	21	6.1	147	42.7	84	24.4	92	26.7	344	100
The newspapers and magazines	42	12.2	84	24.4	50	14.5	126	36.6	42	12.2	344	100
The internet	105	30.5	71	20.6	21	6.1	42	12.2	105	30.5	344	100
The friends and acquaintances	_	_	105	30.5	63	18.3	71	20.6	105	30.5	344	100

From the previous table it is clear that the TV is the main source of information about the global climate changes for the housewives sample of study by 57.3% followed by the internet by 30.5%; the internet also represented the last source of information for 30.5% of the study sample, the third source was the newspapers and magazines by 12.2%. The friends and acquaintances were not the first source for any members of the study sample; they came second by 30.5%. The radio was not the first source for any members of the study sample; it came last for 26.7% of the study sample as a source of information. This may be due to the fact that the TV is still the most common in all Egyptian houses and the main source of information in all fields and the most attractive as many studies have shown.

Table (11) Relative distribution of the study sample according to they believe that they play a role in causing global climate change

The Variables	The Number	Percent
We have a role	239	69.5 %
We don't have a role	105	30.5 %
Total	344	100%

It is clear from table (11) that the most housewives sample of study think that the play a role in causing global climate change by 69.5% against 30.5% for those who do not believe they have any role. This shows the high level of awareness for the housewives sample of study of the causes global climate change, and this is consistent with the descriptive results that refer to the housewives' awareness of global climate change in the sample of study. This may be due to the interest of the information media of this problem and their discussion of its causes and repercussions which led to high level of awareness of the causes of this problem

Table (12) Relative distribution of the study sample according to they believe that they have a role in safeguarding the environment from global climate change

The Variables	The Number	Percent
We have a role	260	75.6 %
We don't have a role	84	24.4%
Total	344	100%

From the previous table it is clear that the most housewives sample of study think that they have a role in safeguarding the environment from global climate change by 75.6% against 24.4% who do not think they have any role. This shows the high level of awareness for the housewives sample of study of the protection methods from these changes.

Table (13) Relative distribution of the study sample according to their suggestions about ways to protect the environment from global Climate change

The suggestions	The Number	Percent
Not burning litter and putting it in special places	197	57.3%
The increase in green areas inside and outside the house	245	71.2%
Rationalizing home power	150	43.6%
Decreasing home waste	56	16.3%
The optimal use of home resources	42	12.3%
Being aware of home resources best use	22	6.4%

From the previous table it is clear that 71.2% of the housewives sample of study think that the increase in green areas inside and outside the house is one of the most important ways of protection from global climate change; 57.3% was for not burning litter and putting it in special places; rationalizing home power reached 43.6%; decreasing home waste reached 16.3%; the lest suggestion considered by housewives as a way of protecting the environment against the global climate change was the optimal use of home resources and being aware of their best use by 12.3% and 6.4% respectively.

Table (14) Relative distribution of the study sample according to their views about the ways that the government can do to safeguard the environment from global climate change

The ways that the government can do to safeguard the environment from global climate change	The Number	Percent
Increasing the green areas in streets	231	67.2 %
Informing citizens of the causes of global climate change and how to limit it	105	30.5%
Passing anti-waste laws that cause climate change	224	65.1%
Protecting the soil against decrease	21	6.1%
Activating the punishments to deter those who violate the environment laws	11	3.2%
Taking part in the conferences and agreements to protect the environment from global climate change	9	2.6%
Increasing projects and factories that recycle waste	152	44.2%
Fixing filters to chimneys of factories and cars	53	15.4%

From the previous table it is clear that the increasing the green areas in streets, passing anti-waste laws that cause climate change, increasing projects and factories that recycle waste, informing citizens of the causes of global climate change and how to limit it were among the most important views of the housewives sample of study about the ways that the government can do to safeguard the environment from global climate change by 67.2%, 65.1%, 44.2%, 30.5% respectively. The least important suggestions of the housewives sample of study about the ways that the government can do to safeguard the environment from global climate change included fixing filters to chimneys of factories and cars, protecting the soil against decrease, activating the punishments to deter those who violate the environment laws and taking part in the conferences and agreements to protect the environment from global climate change by 15.4%, 6.1%, 3.2%, 2.6% respectively.

Table (15) Relative distribution of the study sample according to the level of awareness of global climate change

Awareness Level	The Number	Percent
High level	218	63.4%
Mid level	105	30.5%
Low level	21	6.1%
Total	344	100%

From the table (15) it is clear that the most housewives sample of study have a high level of awareness of global climate change in connection with their sense of the problem, its causes and repercussions, interest in it as a global problem and following its developments by 63.4% followed by mid level housewives by 30.5% and finally low level of awareness by 6.1%.

Table (16) Relative distribution of the study sample according to the level of their behavioral practices associated with some Home Environment Resources

Behavioral practices Level	The Number	Percent
High level (good behavioral practices)	155	45.1%
Mid level (fairly good behavioral practices)	189	54.9%
Low level (bad behavioral practices)	--	--
Total	344	100%

From the previous table it is clear that the highest percent of behavioral practices for the housewives associated with some home resources was for the mid quality level by 54.9% followed by the good level of behavioral practices by 45.1% in connection with the housewives' following correct eco-friendly behavioral practices when using these resources, rationalizing its use and not wasting it and

informing the family members of this, whereas there was no representation for the study sample members who follow bad behavioral practices or unfriendly to the environment associated with these resources which means that there is a high level of eco-friendly behavioral practices when using these resources for study sample members.

Second: Results in the Light of the Study Hypotheses:

Results of the First Hypothesis:

There are no statistically significant differences between the average scores of the rural housewives and urban housewives in both the awareness of global climate changes and behavioral practices associated with some resources in the home environment.

To verify this hypothesis, the Independent-T-Test was used to know the significance of differences between the average scores of the rural housewives and urban housewives in both the awareness of global climate changes and behavioral practices associated with some resources in the home environment.

Table (17) shows that there are statistically significant differences between the average scores of the rural housewives and urban housewives in information and knowledge associated with global climate change, the attitudes towards these changes and the overall awareness of global climate change where the (T) value reached (-14.428, -3.875, -8.603) respectively. These all are statistically significant at level 0.001 for the urban housewives. This may be due to the urban housewives' contact with cultural means that can provide them with information and develop their attitudes towards climate changes resulting in high level awareness. This is consistent with Qabani (2007) that stressed that there are differences between the rural and urban students in environmental awareness in favour of the urban students. This differs from El-Zaki and Ibrahim (2005) that stated that there are no differences between the rural and urban housewives in awareness of safeguarding the home environment from pollution.

Table (17) Significance of differences between the average scores of the rural and urban housewives in the awareness of global climate changes (N=344).

The Variables	Rural housewives N= 210		Urban housewives N= 134		(T) value	Significance level
	Mean	Std. Deviation	Mean	Std. Deviation		
Information and knowledge	43.400	±8.195	52.709	±3.596	- 14.428	0.001
Attitudes	46.300	±11.827	49.746	±4.091	- 3.875	0.001
Overall awareness	89.700	±19.535	102.455	±7.144	- 8.603	0.001

Table (18) Significance of differences between the average scores of the rural and urban housewives in the behavioral practices associated with some Home Environment Resources N=344

The Variables	rural housewives N= 210		urban housewives N= 134		(T) value	Significance level
	Mean	Std. Deviation	Mean	Std. Deviation		
Practices associated with power and house appliances resource	48.00	±4.890	47.179	±3.109	1.732	Not sign
Practices associated with water resource	20.700	±2.105	19.082	±2.783	6.118	0.001
Practices associated with household waste resource	30.200	±2.756	31.575	±3.802	- 3.881	0.001
Practices associated with household decorative plants resource	9.100	±3.120	9.903	±1.213	- 2.844	0.01
Total behavioral practices	0.225	±9.999	107.739	±7.144	- 8.603	Not sign

From the previous table it is clear that there are statistically significant differences between the average scores of the rural housewives and urban housewives in behavioral practices associated with the water resource where the (T) value reached 6.118

which is a statistically significant value at significant level 0.001 in favour of the rural housewives. There are also statistically significant differences between the average scores of the rural housewives and urban housewives in behavioral practices associated with

the waste and decorative house plants where the (T) value reached (-3.811, -2.844) respectively which are statistically significant values at significant level (0.001, 0.01) respectively in favour of the urban housewives. Although there are differences between the average scores of the rural housewives and urban housewives in behavioral practices associated with the power and house appliances and in the total behavioral practices, these differences are not statistically significant where (T) value reached (1.732, 0.225) respectively which are not statistically significant values. This may be due to the high level of correct behavioral practices for the housewives sample of study generally. This is consistent with Sarhan (1995) that referred to home environment has an effect on developing the responsibility towards developing the practice of reducing the environmental pollution and Shalaby and Qabani (1998) that stated the presence of statistically significant difference between the rural housewives and urban housewives

in rationalizing consumption as a behavioral practice followed when using home resources and El-Zaki and Ibrahim (2005) that stated that there are no statistically significant differences between the rural housewives and urban housewives in some aspects of the consumption behavior. Thus the first hypothesis is partially verified.

Results of the Second Hypothesis: There are no statistically significant differences between the average scores of the working housewives and non-working housewives in both the awareness of global climate changes and behavioral practices associated with some resources in the home environment.

To verify this hypothesis, the Independent-T-Test was used to know the significance of differences between the average scores of the working housewives and non-working housewives in both the awareness of global climate changes and behavioral practices associated with some resources in the home environment.

Table (19) Significance of differences between the average scores of the working and non-working housewives in the awareness of global climate changes   N=344

The Variables	Working housewives N= 218		Non-working housewives N= 126		(T) value	Significance level
	Mean	Std. Deviation	Mean	Std. Deviation		
Information and knowledge	51.473	±4.510	39.333	±7.302	16.892	0.001
Attitudes	52.060	±3.951	40.000	±11.809	11.110	0.001
Overall awareness	103.532	±6.504	79.333	±18.744	14.012	0.001

From the previous table there are statistically significant differences between the average scores of the working housewives and non-working housewives in information and knowledge associated with global climate change, the attitudes towards these changes and the overall awareness of global climate change where the T value reached (16.892, 11.110, 14.012) respectively. These all are statistically significant at level 0.001 for the working housewives. This may be due to the urban housewives' cultural openness on the outside world and those around in the work environment which may be a source for their information about climate changes and forming positive attitudes towards them. This is consistent with the result previously stated .

that friends and acquaintance represent the second source in order for information by 30.5% about climate changes for the members of the study sample. Therefore, working housewives are more liable to information sources about awareness of global climate change. This is consistent with Abu Sery and Zhagloul (2005) that referred to the presence of difference between working and non-working housewives in realizing the inside pollution in the home environment in favor of the working housewives, whereas is different from the study by El-Zaki and Ibrahim (2005) that stated there are no differences between working and non-working housewives awareness of safeguarding the environment from pollution

Table (20) Significance of differences between the average scores of the working and non-working housewives in the behavioral practices Associated with Some Home Environment Resources   N=344

The Variables	working housewives N= 218		non-working housewives N= 126		(T) value	Significance level
	Mean	Std. Deviation	Mean	Std. Deviation		
practices associated with power and house appliances resource	49.711	±3.789	44.167	±2.488	16.359	0.001
practices associated with water resource	20.784	±2.677	18.833	±1.579	8.503	0.001

practices associated with household waste resource	31.739	±2.885	29.000	±3.175	7.966	0.001
practices associated with household decorative plants resource	10.711	±1.169	7.167	±2.805	13.521	0.001
Total behavioral practices	112.945	±7.948	99.167	±8.468	14.867	0.001

Table (20) shows that there are statistically significant differences between the average scores of the working housewives and non-working housewives in behavioral practices associated with resources of power, house appliances, water, household waste, house decorative plants and in the total behavioral practices where the T value reached (16.359, 8.503, 7.966, 13.531,14.867) respectively. These all are statistically significant at level 0.001 for the working housewives. This may be due to the working housewives' realization of the value of resources more than the non-working housewives. Therefore, these behavioral practices associated with these resources are positive and eco-friendly. This is consistent with the studies of Chang (1992) and Shalaby and Qabani (1998) that explained the presence of statistically significant differences between the working housewives and non-working housewives in the fields of rationalizing consumption and the study of Abu El-Nasser and Mahfouz (2005) that referred to the presence of difference between working and non-working housewives in the managerial practices in reducing pollution in favour of the working housewives. Thus the validity of the second hypothesis is not proved and the alternative hypothesis being accepted refers to presence of statistically significant difference between the average scores of working and non-working housewives in the awareness of global climate changes and behavioral practices associated with some resources in the home environment.

Results of the Third Hypothesis:

There is a statistically significant relationship between some variables of the socio-economic level of the family (housewife's age- number of marriage years- family size- income level- husband's educational level- wife's educational level) and both the awareness of global climate changes and behavioral practices associated with some resources in the home environment.

To verify this hypothesis, the correlation coefficients was calculated between some variables of the family socioeconomic level and both the awareness of global climate changes and behavioral practices associated with some resources in the home environment.

Table (21) Correlation coefficients between some variables of the family socioeconomic level and both the awareness of global climate changes and behavioral practices associated with some resources in the home environment.

The Variables	The housewife's age	Number of marriage years	Family size	Husband's educational level	Wife's educational level	Family income
Information and knowledge	**0.214-	0.139**-	**0.342-	**0.754	**0.812	0.542**
Attitudes	- 0.308**	**0.219-	- 0.324**	*0.642*	0.687*	0.373**
Overall awareness	- 0.278**	- 0.191**	- 0.348**	0.727**	0.780**	0.472**
practices associated with power and house appliances resource	- 0.241**	- 0.031**	- 0.055	0.307**	0.515**	0.136*
practices associated with water resource	- 0.233**	- 0.280**	- 0.203**	0.303**	0.340**	0.002
practices associated with household waste resource	- 0.306**	- 0.162**	- 0.147**	0.418**	0.424**	0.374**
practices associated with household decorative plants resource	- 0.285**	- 0.324**	- 0.349**	0.644**	0.747**	0.416**
Total behavioral practices	- 0.320**	- 0.210**	- 0.203**	0.487**	0.608**	0.275**

(**) Significant at the 0.01 level (2– tailed)   (*) Significant at the 0.05 level (2- tailed)

Table (21) shows that there is a negative statistically significant relationship between some variables of socioeconomic level which are housewife's age, number of marriage years, family size and both the housewife's awareness of global climate changes and behavioral practices associated with some resources in the home environment at significant level 0.01where the more rise in the

housewife's age, number of marriage years, family size, the less is the level of the housewife's awareness of global climate change whether in connection with information and knowledge or forming positive attitudes towards these changes and the less level of positive behavioral practices associated with some resources in the home environment which secure her participation in safeguarding the environment from the global climate changes. This may be due to the more rise in the housewife's age, number of marriage years, family size, the more busy she becomes to be able to follow the changes around her or information media that allows her to know the problem of climate changes and form positive attitudes towards it and practice good behavior when using some resources in the home environment through which she can take part in safeguarding the environment from these changes. This is consistent with Abu Sery and Zhagloul (2005) that referred to the presence of statistically significant differences in the housewife's awareness of pollution in the inside environment in favour of the housewives in the small size families, whereas it differs from it in the effect of the housewife's age on the level of awareness of pollution in the inside environment in favour of the higher stages of age.

Table (21) also reveals that there is a positive statistically significant relationship between some variables of socioeconomic level which are the educational level of the husband and the wife and the family income and both the housewife's awareness of global climate changes and behavioral practices associated with some resources in the home environment at significant level 0.01 This means that the more higher the educational level of the husband and the wife and the family income, the higher of the level of awareness of global climate changes and the higher is the level of behavioral practices associated with some resources in the home environment which contribute to solving or avoiding the climate change

problems. This may be due to the idea that the higher the educational level, the higher is the ability of understanding what happens of climate changes. In addition, the more interest in following the environment problems, participating in safeguarding it or solving them through some behavioral practices in the home environment. This is consistent with the study of Racz (1993) that referred that the individual's level of education is one of the important and influential factors in the degree of knowing the systems of environment around him and the dangers caused by them. It is also consistent with Haqy (1998) study that stated the presence of statistically significant differences in the awareness of safeguarding the environment from pollution according to the housewife's level of education at significant level 0.001, whereas is different from it in the absence of effect of the housewife's educational level on her consumption behavior when using her resources. These results are also different from the study of Helmi (1998) that stated that there are no differences in the environmental the housewives' awareness, whether educated or not educated. However, the results are consistent with El-Zaki and Ibrahim (2005) that referred that education raises the level of awareness of the environmental problems, whereas it is different from it because there are no differences of awareness of safeguarding the home environment from pollution due to income level. Thus, the third hypothesis is verified.

Results of the Fourth Hypothesis:

There is a statistically significant relationship between the housewife's awareness of global climate changes and behavioral practices associated with some resources in the home environment.

To verify this hypothesis, the correlation coefficients were calculated between housewife's awareness of global climate changes and behavioral practices associated with some resources in the home environment.

Table (22) correlation coefficients between housewife's awareness of global climate changes and behavioral practices associated with some resources in the home environment.

The Variables	practices associated with power and house appliances resource	practices associated with water resource	practices associated with household waste resource	practices associated with household decorative plants resource	Total behavioral practices
Information and knowledge	0.586**	0.132*	0.664**	0.700**	0.650**
Attitudes	0.729**	0.327**	0.689**	0.895**	0.811**
Overall awareness	0.696**	0.250**	0.710**	0.845**	0.773**

(**) Significant at the 0.01 level (2– tailed)   (*) Significant at the 0.05 level (2- tailed)

Results in table (22) showed that there is a positive correlation statistically significant between housewife's awareness of global climate changes and behavioral practices associated with some resources in the home environment at significant level 0.01, that is, the more rise in the level of the housewife's awareness of global climate changes regarding the knowledge of causes of this phenomenon and its repercussion and results, the protection from it, forming positive attitudes towards it and following its developments on the domestic and global levels, the more sound and balanced are her behavioral practices associated with some resources in the home environment and the more eco-friendly are her practices that help protect it and solve its problems. In other words, awareness of global climate changes is the indicator of the housewife's behavioral practices associated with some resources in the home environment—an indicator of human behavior. This is consistent with Mainieri et al. (1997) that referred to the presence of positive correlation between interest in the environment and the individual's consumption behavior and consistent also with El-Zaki and Ibrahim (2005) that concluded that the more rise in the level of the housewife's awareness of protecting the home environment from pollution, the more she rationalizes the consumption of home resources. It is also consistent with the study by Qabani (2007) that concluded the presence of positive correlation between the environmental awareness for the University City students and behavioral practices associated with it. It is consistent with the study by Al-Halaby (1997), Soonthonsami and Nova (2001) and Tarrant and Cordell (1997), whereas it is inconsistent with the study of Takaia (1991) that pointed out that the environmental awareness and behavior are different in many cases. Thus, the fourth hypothesis is verified.

Results of the Fifth Hypothesis:

The percent of independent variables contribution (the housewife's awareness of global climate changes and some socio-economic level variables) to the explanation of the dependent variable occurrence (housewife's behavioral practices associated with some resources in the home environment) according to the weight of regression coefficients and degrees of correlation to the dependent variable.

To verify the validity of this hypothesis, regression analysis test by the Step Forward Wise method was carried out for the dependent variables (the variables of the socioeconomic level and awareness of global climate changes and its aspects) with the independent variables of the behavioral practices associated with some resources in the home environment.

Table (22) Regression analysis by the Step Forward Wise method

The steps Order	Dependent variables	Correlation matrix R	Rate of participation R2	Regression coefficients	F value	T Value	Significance level
First step	awareness of global climate changes	0.773	0.598	0.596	507.776	22.534	0.001
Second step	Housing Environment	0.835	0.698	0.696	393.151	-10.616	0.001
Third step	Housewife's work	0.857	0.734	0.731	312.179	-6.793	0.001
Fourth step	Housewife's age	0.865	0.749	0.746	252.715	-4.531	0.001
Fifth step	Family size	0.871	0.759	0.755	212.593	3,719	0.001
Sixth step	Family income	0.880	0.774	0.770	192.685	4.820	0.001

Results in table (23) showed that the global climate changes variable was the first variable to be analyzed in regression as a first step in explaining the housewife's behavioral practices associated with some resources in the home environment where the R2 value reached 0.598, that is, global climate changes awareness explains 59.8% of the housewife's behavioral practices with T value 22.534, which is statistically significant at 0.001. This means that awareness of global climate changes is one of the most influential variables on the housewife's behavioral practices associated with some resources in the home environment as the value of R2 shows which increased by adding the housing environment variable as a second step by 10% so that the participation percentage increases with the dependent variable to 69.8% where the T value reached -10.616, which is a statistically significant value at 0.001. The result of the third step in the regression analysis was the housewife's work by increase of 1.5% so that the participation percentage with the dependent variable increases to 73.4% at significant level 0.001. The fourth step is the introduction of the housewife's age variable with a participation percentage 0.8%, where

the participation percentage with the dependent variable increased to 74.9% where the T value reached -4.531 which is a statistically significant value at0.001. This means that with the increase in the housewife's age, the level of eco-friendly behavioral practices when using home resources decreases. The participation value R2 increased by adding the family size variable as a fifth step by 0.6% so that the participation percentage with the dependent variable increased to 75.9% with the T value 3.719 which is a statistically significant value at 0.001. In the last step, the family income variable is introduced with participation percentage 0.9% where the percent of the independent variables participation as a whole increased in the explanation of the dependent variable (behavioral practices) after the family income variable is introduced as a last step to 77.4% with T value 4.820 which is a statistically significant value at 0.001. From this analysis, we find that awareness of global climate change is one of the most important variables affecting housewife's behavioral practices associated with some resources in the home environment in addition to the housing environment, the housewife's work, the housewife's age, the family size and the family income. Thus, the fifth hypothesis is verified.

Recommendations:

-Intensifying the presentation of programs aiming at making the housewives aware of global climate changes, their causes and repercussions in the influence on the individual and society whether the domestic or the global and her role in helping make these changes and her role in safeguarding the environment from these changes by rational use of the available resources in the home environment closely related to these changes through holding forums, lectures or through all the aural, readable and visual information media stressing the importance of using an easy, simplified style avoiding the specialized scientific terminology so that the housewife can understand the issue and take part in avoiding or decreasing its occurrence and solving it and making her family members aware of the importance of environment and its safeguarding.

-Calling all the official authorities to pass all the laws and legislations to safeguard the environment from global climate changes whether related to the establishments or the individuals and activating the positive role of civil non-governmental society establishments, societies, unions, parties and syndicates towards safeguarding the environment from global climate changes and putting suitable protective programs to limit the dangers of this problem.

-Raising the awareness of correct behavioral practices towards the environment and augmenting the responsibility of woman towards the faulty behavior or exaggerated consumption of the home resources adopting sound behavior and raising the environmental awareness of her children.

-Stressing the role of information media in forming the individual's thought and culture and providing him with information and knowledge about global climate changes and their repercussions to form a public opinion that respects the environment problems and force the decision makers to endorse development plans to solve this problem on the national level and thus help to solve it on the global level.

- Providing educational programs through schools that stress the importance of safeguarding the environment especially for children to inculcate the environmental values that support the positive attitudes towards safeguarding the environment.

- Conducting more studies that aim at studying and evaluating the quantitative and qualitative effects of global climate changes on both the local and global levels and the role of the behavioral practices of the individuals and groups generally and the woman and mother especially in this case.

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