KNOWLEDGE, ATTITUDES AND PRACTICES OF FEMALE COLLEGE STUDENTS REGARDING ENVIRONMENT

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ABSTRACT

The main aim of the study was to assess the knowledge, attitude and practices related to environment particularly among the female college students from first year and fourth year BS Home Economics. Both quantitative and qualitative questions were included. 100 students were given the questionnaires online, comprising of both open and close ended questions related to environmental and water issues. Their responses showed a varying degree of Knowledge, attitudes and practices regarding these environmental issues. There was a significant difference in the reported practices according to grade level of the students. A higher proportion of first year students reported practices following environmental friendly practices as compared to fourth year students. Overall only 58% had a view that environment affects our health.

These findings indicate a dire need for raising awareness about the role of environment in human wellness and strategies for inculcating environment friendly habits.

Keywords: Female college students, knowledge, resource conservation, habits, practices.

INTRODUCTION

Importance of environmental concern has increased manifold in the past few decades. This worldwide concern has sought the attention of individuals, society in general, and various environmental organizations, industries and media groups. Significant stress has been paid to raise awareness among the general public related to preserving the ecological environment (Olalekan et al, 2019). No considerable attention has been paid towards spreading awareness among the people and organization, regarding their attitudes and practices create, contribute or worsen the ecological problems, which in turn poses threat to our planet (Stern, 2018). In the past the studies have been focused on this potentially important aspect of environmental abuse, with a focus on college students mainly emphasizing on their knowledge, attitudes and practices (González-Timoneda, 2018). Similar studies related to these problems with school children Blanchet- Cohen, 2008; Lo, 2010; Said, Yahaya & Ahmadun, 2007; Tuncer, Ertepinar, Tekkaya & Sungar, 2005; Van Petegem & Blieck, 2006; Witt & Kimple, 2008). These surveys were based on findings from students enrolled in public and private colleges and universities. Water conservation behavior and attitudes depends on the perception of residents regarding water resource and usage (Daud et al, 2020).

The number of countries participated in these studies, showed their participation in researches related to environmental knowledge, attitudes and practices of young members of the society. The diverse number of countries, with their diverse population, have been the primary subjects who participated in these studies Belgium and Zimbabwe (Van Petegem & Blieck, 2006), Canada (Blanchet-Cohen, 2008); China (Lo, 2010), Malaysia (Said et al., 2007), Turkey (Tuncer et al., 2005), and the United States of America (Witt & Kimple, 2008).

In this research, to achieve maximum results, both open and close ended questions were included in the questionnaire for grade 5-9 students, related to knowledge, attitudes and practices of students regarding water use.

METHODS

Each student filled out the consent form agreeing to participate in the survey. The students were given the questionnaires online, comprising of both open and close ended questions related to environmental and water issues.

Instrument Development

The researcher developed seven qualitative questions in relation to environment e.g "what is environment"? And "how environment can affect us"? etc. The pilot testing was done on the students to check the reliability of the questionnaire. Final questionnaire was constructed based on the amendments

made on the basis of the student's responses and recommendations. The researchers compiled the responses to the seven qualitative questions, studied these comments, and constructed a draft Version of the online survey using the web-based survey builder, SurveyMonkey.com. Pilot tests were performed with random students to determine readability, comprehension and completion time. Revisions were made to the survey based on students' comments. A final instrument was constructed incorporating their recommendations. Mixed method research design was used to evaluate the answers related to both qualitative and quantitative questions. Quantitative questions were based on the knowledge and practices concerning the environmental issues.

Statistical Analyses

SPSS version 16 was used for the analyses of the frequency counts and percentages were compiled of the student responses. Chi-square test was used to determine the year wise difference of the students in terms of knowledge, attitude and practices. Inter-comparison of the student's responses was also done. For open ended questions, coding process was used. Themes were also developed for the questions concerning environment. In an effort to ensure the accuracy of the qualitative analyses, the researchers validated the findings through the process of triangulation of data sources."Triangulation is the process of corroborating evidence from different individuals, types of data, or methods of data collection in descriptions and themes in qualitative research" (Creswell, 2005, p. 252). Through the process of triangulation, the researcher considers the coalescence of three essential data sources. In this study, the process was accomplished through (1) the survey responses themselves, (2) the researchers' notes, and (3) the corroboration of quantitative and qualitative findings.

Sample

Out of the total 115 students participated 100 students successfully completed this survey. The number of students and their response rate is given in table 1:

Table 1.Year Wise Percentage of Student Participation

Level of Students	N	%
First year	19	16.5
Second Year	25	21.7
Third Year	24	20.9
Fourth Year	24	20.9
Fifth Year	23	20
Total	115	92

RESULTS

As to the question, what they think is the environment, 43 % of the students answered college is the part of environment. 68% of the students discuss environment in their classes. Students opinion related to environment are given in table 2 below:

Table 2: Agreement of respondents with the statements about Effect of Environment on Health

Statements	Yes	No	Don't know
Environment affects your health	583%	13.9%	27.8%
Smoking can make your environment polluted.	93%	2.6%	4.3%
Molds and Fungus in the environment is bad for health	77.4%	2.6%	20%

Conservation Practices

Majority of the students agreed i.e 93% to the fact that our habits and practices affect the environment. Students participated in the conservation practices as given in table 3. While taking shower, 79% of the students' shower normally only 12% turn their showers off while applying soap. Further, 70% turned off their water taps while brushing teeth.

Table 3: Conservation Practices

Which gadget do you switch off at night?	N	%
T.V	83	72%
Video Games	83	72%
Light bulbs	104	90%
Computer	57	50%

A majority (74%) of the students believe that it is against the law to litter while 97% keep environment clean, still 31% are of the opinion that they litter sometimes. 37% students said that they throw trash in the bins, whereas 34% asked their fellow students not to litter.

Concerns for the Environment

Majority of students (88%) believed that they care about environment. Almost all students i.e 97%, were of the opinion that they like to spend time outdoors. 52% students were concerned about the global warming. 90% agreed that pollution is damaging our planet. How they can help save their environment is shown in table 4 below.

Table 4: Percentage of Students Caring About various actions needed for Environment

Actions	N	%
Picking up wrappers from the ground	108	94%
Tree plantation	102	89%
No smoking restaurants	87	76%
Solar power	87	76%
Discouraging the use of insecticides	60	52%

Differences in Student Level

There was a significant difference of opinion, between the students of first year and fourth year, regarding knowledge about environment. Fourth year students were found to be more knowledgeable then first years while first year students were involved more in eco-friendly activities as evident in the table 5 below.

Table 5: Differences in belief in facts (knowledge) and practices of 1st and 4th year students

Items of Knowledge and Practice	Academic Year		X2	Df.	P value
Belief	**1st Year**	**4th Year**			
Molds/ Fungus can make you sick	68%	92%	9.3	2	.009
People harm the environment	100%	92%	6.0	1	.026
Practices					
Picking up Wrappers	47%	23%	10.5	2	.005
Turning tap off while brushing teeth	78%	60%	4.5	1	.028
Asking class fellows not to throw trash	44%	20%	7.6	2	.021

Results of Qualitative Study

The three open ended questions about the environment in the questionnaire, were collapsed by coding of the students' responses which resulted in the development of six themes. Presentation of themes for each of the three questions is as follows:

What is worrisome about the environment? Two themes and three sub-themes came out when the students were asked about "what is worrisome "for them as far as the environment is concerned. Pollution is the first theme that emerged. The students were genuinely upset about the trash being thrown on the grounds and not picking them up. The sub theme that emerged from this was "cigarette smoking". Student showed their dismay at people throwing cigarette butts here and there.

THE second theme that emerged was "Global Warming", the students were really concerned about this. The sub theme emerged from this was "what will happen after 20 years?" first year students were more concerned about this issue whereas the fourth year students were mainly worried about the water scarcity and human insensitivity towards the effects of pollution.

The answers to the question "what they feel good about the environment?" the students were of the opinion that natural beauty, no pollution and outdoor activities are the good things about the environment and make them happy. The students of first year were more interested in the safety of plants and animals as they are a part of nature. The fourth year students stressed the need of recycling and its importance for a clean and greener environment.

How can I help the environment? Yet another important theme that emerged. The answers to the questions if" I pick wrappers and trash from the ground" or "stop cigarette smoking" is bad for the environment" were the important questions under this theme. Almost all the students of both years were unanimously agreed upon cleaning the environment and eradicating all pollution causing activities. Promoting car pools and turning lights and computers off at night, were some of the major activities which were mutually agreed upon by the students.

CONCLUSION

This study gave an insight into the knowledge, attitudes and practices of the students regarding environment. About 60% students responded that environment can have an adverse effect on our health like mould and smoke from the cigarettes. Half of the students were clear about the concept of global warming but since for many years now Lahore city is facing the menace of Smog, students were aware that this phenomenon is the result of increased pollution in the air. A great number of fourth year students were aware of the fact that moulds and fungus is bad for healthier environment. First year students were more involved in the activities like no littering and saving water in various water consuming activities like teeth brushing and bathing. The inclusion of environment as a subject need to be mandatory in the curriculum of junior classes so that the students are well aware of this important aspect right from the start.

Parent's education does play an important part in the grooming of their children especially when it comes to awareness regarding environment, as the awareness starts from homes. While asking the question about recycling, students knew about the benefits of this process but very few households actually practice this at homes. By initiating the environmental education, the awareness regarding recycling at home, school and community can be promoted.

Environmental education should be a core of any curriculum, the objective of which should be to allow students to express themselves and by practically applying that knowledge. Preschool is the most suitable time for teaching environmental education Witt and Kimple (2008). Learning at this level, may be retained throughout their lives. However, all grade levels should be formally educated about the importance of environment and its effect on their health and wellbeing (Lo, 2010). So much so that Blanchet-Cohen (2008) emphasized on the need for students to have a personal contact with nature and the need for a mature training. In another study by Lo (2010), students involved in experiencing nature, developed a genuine liking for the environment. In this study, students exhibited some very positive attitude and behavior towards, environmental issues. More formal interactive participation by the parents, students and schools could ensure better understanding of and spreading awareness of the basic environmental issues. Newsletters and arranging special programs for their participation should be encouraged.

This study, by using mixed method research design, gives a detailed insight into the environmental knowledge, attitudes and practices of the college students. Future researches would take up from here to further promote the school classroom environment, to inculcate the environmental knowledge and education, into their students on a daily basis. Thus promoting sustainable knowledge and practices among the students at an elementary level, how to love the mother earth and respect the environment in which they breathe.

LIMITATION OF THE STUDY: The study is limited to one college only but similar studies could be carried out in other institutions.

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