Human and environment: relationship, perception towards environmental problems and willingness to sacrifice for environment

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Abstract

Global environmental problems are now a days well known to everyone and are also increasingly seen as threats to the survival of human beings. These environmental problems are due to the human activity. Hence there is a need to find out the solution to reduce the burden on natural systems and its resources. In order to bring solutions to environmental problems a shift in social values, attitudes and behaviours of human population is needed. The values motivates to act and influence behaviour, hence various actions can be taken environment sustainability. The various religious environmental movements can play a positive role in tackling environmental problems. These movements have ability to activate the actions needed to attain environmental sustainability and swift hundreds of millions of their followers around the world to pursue proenvironment attitudes and behaviours. Hence, a study was conducted to find out the relationship between human and environment, perception regarding environmental problems and willingness to sacrifice for environment. The data were collected through questionnaire on a sample of 120 respondents (25 each from respective religion viz. hindu, muslim, sikh, parsi, Christian and Jainism) of Vadodara City through random sampling. Descriptive and relational statistics was used for presenting results. The findings of the study revealed that majority of the respondents were middle aged, graduate and self employed belonging to middle income group and joint family. Majority of the respondents believed that there exists a relationship between human and environment and god too. Majority of the respondents perceive that all kinds of pollution and other problems are extremely dangerous for the environment. Majority of the respondents were very willing to sacrifice for the environment. It was also found that no relationship existed between relationship between human and environment, perception regarding environmental problems, willingness to sacrifice for environment and religion. A positive relationship was found between relationship between human and environment, perception regarding environmental problems and willingness to sacrifice for environment.

Keywords: Relationship between human and environment, Environmental problems, Perception, Willingness to sacrifice for environment, Religion.

Introduction

In its multifaceted dimensions, severity and impacts, environmental crisis has been dubbed one of the most central problems facing humanity today¹⁻³. Since the environmental degradation is considered the most pressing environmental challenge of the contemporary world, it is attributable to human actions is also receiving increasing attention.

According to the United Nations, the increase in populated has led to the augmented degrees of resource use and also utilization of technology focusing the production process is surpassing the earths limit to replace depleted resources and reduce the negative effects. The human activities are creating impact on environment such as deforestation, clearance of land for agriculture and urbanization, pollution from various sources viz. domestic and industrial are some of the main causes of environmental degradation. Such activities also lead to destruction of natural habitats which creates an imbalance in

natural equilibrium in the ecosystem and causes to species extinction. Extensive deforestation is a foremost cause of desertification and soil degradation. Pollution related to land, air and water are primary causes of many health problems threatening human societies⁴. Millions of people around the world had suffered due to environmental degradation and hence caused threats to future of the mother earth as well as human beings. These have compelled to coordinate the efforts towards reconciling human affairs with the dynamics of the natural world.

Religion is one of the effective elements on behaviour and cognition⁵. Religion has a recognised role in influencing attitudes, behaviour, perceptions, modes of coping and actions in response to environmental problems, and is thus seen to be an important domain of research and policy on current environmental change³. Religious beliefs and experience had played an important role in shaping individual environmental attitudes and behaviours and also in communities' perceptions

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and responses towards environmental change across the world $^{6\text{-}}$

Majority of people around the world practice one religious or another ⁹⁻¹¹ and their religious beliefs and world view regarding the natural world stimulate people's actions and their relationship with the natural environment ¹², it has been viewed that religion provides a particularly vision for understanding human worldviews and perceptions regarding issues related to social and environmental changes as compared to other cultural elements ^{3,7,13-15}. A sense of purpose can unify entire societies around national goals. Rituals communication has a special place in the movement to create sustainable societies because it has long had the effect of protecting the natural environment ¹⁶.

According to Tomar it has been highlighted that the mother earth had always been revered for all the gifts that it has bestowed us with. All are fortunate enough to get the various blessings of Mother Nature. It nourishes everyone from childhood to the graveyard. In the ancient India there were tales, where mountains, plants, rain god, river, sun, and fire have been worshiped. Basically these are the constituents of our nature, which sustain the life on planet earth. The Hindu scriptures, particularly the Veda and Upnishads, The Smritis literature, the Epics and the Puranas have clearly laid down the rationale for practicing conservation of nature and religious sanction against indiscriminate use of natural resources¹⁷.

In Mahabharata when Pandavas were given exile to live in forest, they were told not to live in a particular forest for a longer time as there would be exploitation of resources rather than utilization. In Buddhism also such relation has been seen. In Karniya met stutt, it says that any living organism whether it is small or large or medium, micro or macro visible or invisible, far or near, born or not born should be in harmony. For this they need to be protected by developing concern for them just like mother protects child. According to Vedas, "We must learn to live in harmony with both nature and fellow beings. To live, to let live and to be able to live together in peace and harmony is the basic 'ethics of all ethics'. A verse from Rig-Veda (R.V. 160.2, 6.5.1.5) states that, "The sky is like father, the earth is like mother and the space as their son. The universe consisting of the three is like a family, and any kind of damage done to any of the three throws the universe out of balance". Yajur Veda (6.33) warns us not to poison water and not to harm trees or cut trees. The Charak Samhita (5th C. BC) also warned that :when air, watver and other elements of nature are spoiled, seasons start working against the routines, vegetation gradually begins to ruin. Quran states (44:11-12), "then watch for the day when a ball of smoke will appear in sky and envelop the people". The day has come and now the smog can be seen in the sky everywhere. Buddha said, "Water must never be misused". But because of the misuse of water, its shortage is being experienced all over the world. Jainism emphasized on protection of flora and fauna¹⁷.

Objectives of the study: i. To find out the believes of respondents about relationship between human and environment. ii. To study the perception of respondents regarding Environmental Problems. iii. To find out Willingness of the respondents to sacrifice for Environment.

Methodology

The research design for the present investigation was descriptive. The sample were collected from Vadodara city purposively. From each religions viz. Hindu, Muslims, Sikh, Parsi, Jainism and Christians, 20 respondents were selected randomly. Thus 120 respondents were considered as sample for present study. The tool to collect data was a questionnaire which contained two Likert type scales (1) Scale to find out the belief of the respondents about relationship between human and religion which contained statements reflecting relationship between human and environment and their belief in god. The responses were "Yes" and "No" where the scores ascribed were 2 through 1 respectively to these responses. (2) Scale to find out the perception regarding Environmental Problems. It contained 15 statements reflecting various environmental problems. The responses were "Extremely dangerous", "Very dangerous", "Somewhat dangerous", "Not very dangerous", and "Not dangerous at all" where the scores ascribed were from 1 through 5 respectively to these responses. (3) Scale to find the willingness of the respondents to sacrifice for environment. This section contained 7 statements indicating ways to sacrifice for protecting the environment. The responses were "Very willing", "Fairly willing", "Undecided", Not very willing" and "Not at all willing". The responses were given scores 5 through 1respectively. The scale was subjected to establishment of content validity. The reliability coefficient derived were 0.647, 0.746 and 0.786 respectively through test – retest reliability.

Major findings

The findings of the study obtained through the analysis of the data supported discussion and interpretations are presented here.

Background information of the respondents: This section deals with the personal and family information of the respondent.

Personal variables: The age of the respondents ranged between 16 to 80 years with the mean of 38.68 years. Nearly three fourth of the respondents were between the age group of 38 to 58 years. Data regarding the education of the respondents highlighted that more than one half of the respondents were graduates. It was observed from the findings that more than one-third of the respondents' were self-employed.

Family Variables: The mean income of the respondents was Rs. 45191.67. Less than one - half of the respondents had their total monthly family income between Rs. 21,000 to Rs. 50,000.More than one-half of the respondents belonged to joint family.

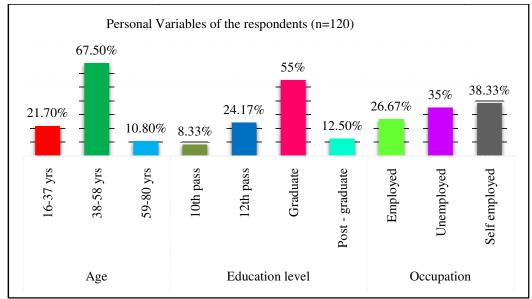


Figure-1: Distribution of respondents according to their personal information.

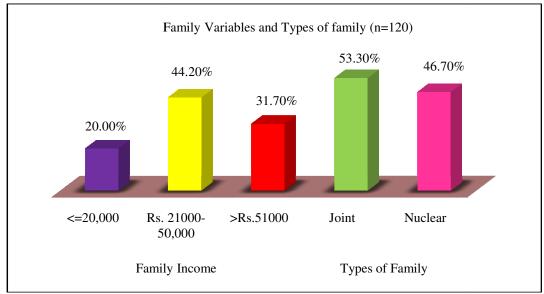


Figure-2: Distribution of respondents according to their family information.

Belief of respondents about Relationship between Human and Environment and God and their religious practices: The data gathered revealed that majority of the respondents believe that "Balance of nature is very delicate and can easily upset", "Human were meant to rule over the rest of nature" and "Humans have the right to modify the natural environment to suit their needs". Nearly one fourth of the respondents attend religious services several time in a year. A little more than one fourth of the respondents pray to god several times a day. More than one fourth of the respondent believes more in god rather than believing others. One half of the respondents were found having strong belief in their religion.

Perception of respondents regarding Environmental Problems: The findings revealed that three fourth of the respondents majority of the think that pollution is caused by cars which is extremely dangerous for the environment. More than one half of the respondents think that pesticides and chemical fertilizers used in farming are extremely dangerous for the environment. Majority of the respondents think pollution causes green house effect which is very dangerous. Less than one fourth of the respondents think that Chlorofluorocarbons in the air causes depletion of Ozone layer which is somewhat dangerous for the environment. Very few percentages of respondents think that air, water and noise pollution cause severe health problems which are not at all dangerous for the environment.

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Willingness of respondents to sacrifice for Environment: It was found that more than one half of the respondents were very willing to pay much higher prices for anything which helps in protection of the environment. More than one third of the respondents were fairly willing to give up habits that are harmful for environment. Very few respondents (11.67%) were not very willing and not at all willing to go out of the way to do what is best for the environment. One fourth of the respondents were undecided about their willingness to take on responsibilities that will help conserve the natural environment.

Testing of Hypotheses

In order to test the hypotheses formulated for the present investigation, as per the nature of variables coefficient of correlation were computed. For the purpose of statistical analysis, the hypotheses were formulated in null form. The results are presented in this section.

H_{01:} There existed no relationship between the Belief of respondents about Relationship between Human and Environment and personal, family variables, perception regarding environmental problems and willingness to sacrifice for environment.

The Table-1 revealed that there exists no significant relationship between belief of respondents about Relationship between Human and Environment and age, education, religion, and total monthly family income of the respondents. A significant relationship was found between Belief of respondents about Relationship between Human and Environment and occupation of the respondents, perception regarding environmental problems, and willingness to sacrifice for environment. Hence, the null hypothesis was partially accepted.

 H_{02} : There existed no relationship between the perception regarding environmental problems and personal, family variables, and willingness to sacrifice for environment.

Table-1: Co-efficient of Correlation showing relationship between the belief of respondents about relationship between human and environment and personal, family variables, perception regarding environmental problems and willingness to sacrifice for environment.

Sr. No	Belief of respondents about Relationship between Human and Environment	n	r- value	Level of significance
1.	Age	120	-0.023	*N.S
2.	Education	120	0.072	*N.S
3.	Occupation	120	-0.213	0.05
4.	Religion	120	0.021	*N.S
5.	Total Monthly Family Income	120	0.050	*N.S
6.	Perception regarding Environmental Problems	120	-0.474	0.01
7.	Willingness to sacrifice for Environment	120	-0.434	0.01

Note: *N.S. = Not Significant.

Table-2: Co-efficient of Correlation showing relationship between the perception regarding environmental problems and personal, family variables, belief of respondents about relationship between human and environment and willingness to sacrifice for environment.

Sr.no	Perception regarding Environmental Problems	n	r- value	Level of significance
1.	Age	120	0.199	0.05
2.	Education	120	-0.020	*N.S
3.	Occupation	120	0.247	0.01
4.	Religion	120	-0.068	*N.S
5.	Monthly Income	120	-0.112	*N.S
6.	Willingness to sacrifice for Environment	120	0.630	0.01

Note: * N.S. = Not Significant.

The data in Table-2 revealed that there exists no significant relationship between perception regarding environmental problems and education, religion and total monthly family income of the respondents. Their existed a positive relationship between perception regarding environmental problems and age, occupation, and willingness to sacrifice for environment. Hence the null hypothesis was partially accepted.

 H_{O3} : There existed no relationship between the willingness to sacrifice for environment and personal, family variables, Belief of respondents about Relationship between Human and Environment and willingness to sacrifice for environment.

Table-3: The co-efficient of correlation showing relationship between the willingness to sacrifice for environment and personal, family variables, and willingness to sacrifice for environment.

Sr. no	Willingness to sacrifice for Environment	n	r- value	Level of significance
1.	Age	120	-0.107	*N.S
2.	Education	120	0.012	*N.S
3.	Occupation	120	0.185	0.05
4.	Religion	120	-0.017	*N.S
5.	Monthly Income	120	0.052	*N.S

Note: * N.S. = Not Significant.

The results revealed that there exists no significant relationship between willingness to sacrifice for environment and age, education, religion, and total monthly family income of the respondents. But a significant relationship was found between willingness to sacrifice for environment and occupation, Hence the null hypothesis was partially accepted.

Conclusion

It can be concluded from the findings that three fourth of the respondents were in the age group of 31 to 50 years with the mean age of 38.68 years. One half of the respondents were graduate and more than one-third were self employed and one half had total monthly family income of Rs. 21,000 to Rs. 50,000 (mean income Rs. 45191.67). One half of the respondents belonged to joint family. Majority of the respondents believe that there exists a relationship between human and environment and god too. Majority of the respondents perceive that all kinds of pollution and other problems are extremely dangerous for the environment. Majority of the respondents were very willing to sacrifice for the environment. A significant relationship was found between relationship between human and environment and occupation of the respondents, perception regarding environmental problems,

and willingness to sacrifice for environment. A positive relationship between perception regarding environmental problems and age, occupation, and willingness to sacrifice for environment. A significant relationship was found between willingness to sacrifice for environment and occupation. People around the world follow one or the other religion which forms their views and actions. The religion is also an effective element in shaping the behaviour of an individual. A strong relationship exists between religion and the natural environment. Hence, religious belief can help in combating environmental problems.

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