PSYCHOLOGY AND LIFE

8

After reading this chapter, you would be able to:

- understand how psychology can be applied to common problems in our lives,
- appreciate the relationship between human beings and the environment,
- analyse how pro-environmental behaviour helps to deal with environmental stressors,
- explain the causes and consequences of social problems from a psychological perspective, and
- learn about the possible remedies of problems such as poverty, aggression, and health.

CONTENTS

In the previous two chapters, you read about some topics related to social behaviour and groups. We will now reflect on a set of social concerns with a wider scope, which are linked to each other and involve psychological aspects. These issues have to be understood and resolved at the level of the community rather than the individual. It is now known that besides affecting our physical health, the environment also influences our psychological processes and behaviour. Human beings also influence the environment through their behaviour, and some of these effects are demonstrated in stress-producing environmental conditions, such as noise, pollution and crowding. At the same time, environmental stressors such as natural disasters are not under human control. Many damaging environmental effects can be reduced with the help of environment-friendly behaviour and a state of preparedness. You will read about the causes and consequences of some social problems such as aggression and violence, health, and poverty and discrimination. You will also get a glimpse of how poverty and deprivation can make people victims of discrimination and social exclusion. An environment of poverty and deprivation has far-reaching implications for developing human potential, social harmony and mental health. Some ways of reducing poverty are also described. In addition, psychological aspects of health, and the impact of television viewing on violence as well as other forms of behaviour are explained. This chapter will show you how psychological understanding can be applied practically to aspects such as pro-environmental behaviour, the reduction of violence and discrimination, and promotion of positive health attitudes.

HUMAN-ENVIRONMENT RELATIONSHIP

Take a moment and try to answer these questions : Can a tree be your 'best friend'? When it gets hot, or when it is crowded, do people become more aggressive? If rivers are said to be holy, why do people make them dirty? How can one remedy the traumatic effects of a natural disaster such as an earthquake or tsunami, or of a man-made disaster such as a poisonous gas leak in a factory? Compare two children who grow up in different physical environments, one in an environment filled with colourful toys, pictures and books, and the other in an environment that contains only the bare necessities of life. Will the two children develop the same kind of cognitive skills? People might give different answers to these questions.

A common idea that comes out of these questions is that the relationship between human behaviour and the environment plays a special role in our lives. These days, there is a growing awareness that environmental problems such as noise, air, water and soil pollution, and unsatisfactory ways of garbage disposal have damaging effects on physical health. Less known is the fact that these forms of pollution, along with many other hidden factors in the environment, influence psychological health and functioning as well. A branch of psychology called **environmental psychology** deals with various psychological issues pertaining to the human-environment interaction in a very broad sense of the term.

The word '**environment**' refers to all that is around us, literally everything that

Chapter 8 • *Psychology and Life*

surrounds us, including the physical, social, work, and cultural environment. In general, it includes all the forces outside human beings to which they respond in some way. In the present section, the discussion will centre around the physical environment. 'Ecology' is the study of the relationships between living beings and their environment. In psychology, the focus is on the interdependence between the environment and people, as the environment becomes meaningful with reference to the human beings who live in it. In this context, a distinction can be made between the natural environment and the built environment. As the name itself suggests, that part of nature which remains untouched by human hand is the natural environment. On the other hand, whatever has been created by human beings within the natural environment is the built environment. Cities, houses, offices, factories, bridges, shopping malls, railway tracks, roads, dams, and even artificially created parks and ponds are some examples of the built environment which show how human beings have made changes in the environment given by nature.

The built environment usually involves the concept of environmental design. The idea of 'design' contains some psychological features, such as :

- The creativity of the human mind, as expressed in the work of architects, town planners and civil engineers.
- The sense of human control over the natural environment, as shown in the building of dams to regulate the natural flow of rivers.
- The influence on the kind of social interaction that takes place in the designed environment. This feature is reflected, for instance, in the distance between houses in a colony, the location of rooms within a home, or in the arrangement of work desks and

seats in an office for formal and informal gatherings.

Different Views of the Human-Environment Relationship

There is more than one way of looking at the human-environment relationship, depending largely on how this relationship is perceived by human beings. A psychologist named Stokols (1990) describes three approaches that may be adopted to describe the human-environment relationship.

(a) The minimalist perspective assumes that the physical environment has minimal or negligible influence on human behaviour, health and well-being. The physical environment and human beings exist as parallel components.

(b) The instrumental perspective suggests that the physical environment exists mainly for use by human beings for their comfort and well-being. Most of the human influences on the environment reflect the instrumental perspective.

(c) The spiritual perspective refers to the view of the environment as something to be respected and valued rather than exploited. It implies that human beings recognise the interdependent relation-ship between themselves and the environment, i.e. human beings will exist and will be happy only as long as the environment is kept healthy and natural.

The traditional Indian view about the environment supports the spiritual perspective. We have at least two examples of this perspective in our country, viz. the customs of the Bishnoi community of Rajasthan, and the *Chipko* movement in the Uttarakhand region (see Box 8.1). By contrast, we also find examples of people damaging or destroying the environment,

Box
8.1

The Bishnois and the *Chipko* Movement

The Bishnois, a small community in Rajasthan, value their trees and wildlife as much as their lives. Following one of the 29 rules given by their *guru*, the Bishnois would do anything to prevent the destruction of trees by human beings, including hugging the trees if they are threatened in any way; the destroyer cannot cut the trees without cutting these human bodies. Similarly, the forest cover in the Himalayan Uttarakhand region has been protected through the *Chipko* movement ('*chipko*' literally means 'sticking to' or hugging trees). The aim of this movement is to conserve forests, prevent landslides and soil erosion in the region, and to support the livelihood of the inhabitants. In the 1960s, when the forest department of the government was not quite successful in curbing the indiscriminate felling of trees in large numbers, people of the economically backward Uttarakhand region expressed their concern through the *Chipko* movement, which became stronger because of devastating floods in 1970.

The *Chipko* movement's memorandum of demands included six principles: (a) only specific trees and vegetation suitable for a particular geographical region should be grown, (b) forests in landslide and soil erosion zones need to be identified and renewed, (c) those who have been customarily living near the forests and depending on them for survival should be given the right to do so, (d) the contractor system for commercial timber exploitation should be abolished, (e) trees used by the villagers must be planted near the villages, and (f) village cottage industries based on minor forest products should be set up to provide jobs to locals for checking migration from villages. This movement has been recognised by environmentalists in India and abroad as well as by the government.

which is a negative instance of the instrumental perspective.

ENVIRONMENTAL EFFECTS ON HUMAN BEHAVIOUR

The human-environment relationship can be appreciated fully by understanding that the two influence each other, and depend on each other for their survival and maintenance. When we focus our attention on the effects of the natural environment on human beings, we find a variety of environmental influences, ranging from physical effects such as a change of clothing in response to climate changes to severe psychological effects such as serious depression after a natural disaster. Some of the effects pointed out by psychologists are described below.

• **Environmental influences on perception** : Some aspects of the environment influence human perception. For example, as you have studied in Class XI, a tribal society of Africa lives in circular huts, that is, in houses without angular walls. They show less error in a geometric illusion (the Muller-Lyer illusion) than people from cities, who live in houses with angular walls.

• **Environmental influences on emotions** : The environment affects our emotional reactions as well. Watching nature in any form, whether it is a quietly flowing river, a smiling flower, or a tranquil mountain top, provides a kind of joy that cannot be matched by any other experience. Natural disasters, such as floods, droughts, landslides, quakes on the earth or under the ocean, can affect people's emotions to such an extent that they experience deep depression and sorrow, a sense of complete helplessness and lack of control over their lives. Such an

influence on human emotions is a traumatic experience that changes people's lives forever, and can last for a very long time after the actual event in the form of **post-traumatic stress disorder** (PTSD).

- **Ecological influences on occupation, living style and attitudes** : The natural environment of a particular region determines whether people living in that region rely on agriculture (as in the plains), or on other occupations such as hunting and gathering (as in forest, mountainous or desert regions), or on industries (as in areas that are not fertile enough for agriculture). In turn, the occupation determines the lifestyle and attitudes of the residents of a particular geographical region. Compare the daily routine followed by a person living in a desert with one living in a mountainous region, and with one living on the plains. It has been observed that an agricultural society has to depend on the collective efforts of its members. Therefore, the members of an agricultural society develop an attitude of cooperativeness, and consider group interests more important than the individual's wishes. They are also closer to nature, more dependent on natural events such as the monsoon, and may face situations in which necessary natural resources such as water are in limited supply. Accordingly, the members of an agricultural society may become more fatalistic in their beliefs. On the other hand, highly industrialised societies feel less close to and less dependent on nature. Members of industrialised societies may value independent thinking, develop an attitude of competitiveness, and cultivate a belief of personal control over what happens to them.

Human Influence on the Environment

Human beings also exert their influence on the natural environment for fulfilling their physical needs and other purposes. All the examples of the built environment express human influence over the environment. For example, the human being started building something called 'houses' by changing the natural environment in order to provide shelter for herself/himself. Some of these human actions harm and damage the environment, and ultimately harm themselves, in numerous ways. For example, human beings use appliances such as refrigerators and airconditioners that generate chemical substances (e.g., CFCs, or chlorofluorocarbons) that pollute the air and, in the long run, may be responsible for physical diseases such as some forms of cancer. Smoking is known to pollute the air around us, and the burning of plastic or metal articles has disastrous polluting effects on the environment. Cutting down trees, or deforestation, may disrupt the carbon cycle and the water cycle. This may eventually affect the pattern of rainfall in a region, and increase soil erosion and desertification. Industries that discharge effluents, and pump this untreated sewage into rivers, seem to be unconcerned about the dangerous physical and psychological consequences of this kind of pollution.

What is the psychological message in all of these examples? The message is that although most of the effects mentioned above are physical in nature, human beings have brought about these effects in order to exhibit their control and power over the natural environment. It is somewhat paradoxical that human beings are using technology to change the natural environment in order to improve the quality of their life but, in reality, they may actually be worsening the quality of life!

Noise, **pollution**, **crowding**, and **natural disasters** are some examples of

environmental stressors, which are stimuli or conditions in the environment that create a stress for human beings. As you have already read in Chapter 3, stress is an unpleasant psychological state which creates tension and anxiety in the individual. However, human reactions to these varying stressors may differ. Some of the damaging environmental effects are described below.

Noise

Any sound that is annoying or irritating, and felt to be unpleasant is said to be noise. From common experience it is known that noise, especially for long periods of time, is uncomfortable, and puts people in an unpleasant mood. Exposure to noise for a long period of time may lead to hearing loss. Apart from that, noise has negative effects on mental activity because it reduces concentration. Many of you might have experienced this when you tried to study for your examination, with the neighbours celebrating a marriage with loud music.

Three characteristics of noise have been found to determine its effect on task performance, namely, **intensity**, **predictability**, and **controllability** of noise. Systematic research on the effects of noise on human beings shows the following :

- When the task being performed is a simple mental task, such as addition of numbers, noise does not affect overall performance, whether it is loud or soft. In such situations, people adapt, or 'get used' to noise.
- If the task being performed is very interesting, then, too, the presence of noise does not affect performance. This is because the nature of the task helps the individual to pay full attention to the task, and ignore the noise. This may also be one kind of adaptation.

- When the noise comes at intervals, and in an unpredictable way, it is experienced as more disturbing than if the noise is continuously present.
- When the task being performed is difficult, or requires full concentration, then intense, unpredictable, and uncontrollable noise reduces the level of task performance.
- When tolerating or switching off the noise is within the control of the person, the number of errors in task performance decreases.
- In terms of emotional effects, noise above a certain level causes annoyance, and can also lead to sleep disturbance. These effects are also reduced if the noise is controllable, or is necessary as a part of the person's occupation. However, continued exposure to uncontrollable and annoying noise can have harmful effects on mental health.

From these observations, one may conclude that the stressful effects of noise are determined, not only by its high or low intensity, but also by the extent to which people are able to adapt to it, the nature of the task being performed, and whether noise is predictable and controllable.

Pollution

Environmental pollution may be in the form of air, water, and soil pollution. Waste or garbage that comes from households or from industries are a big source of air, water, and soil pollution. Scientists know it very well that any of these forms of pollution is hazardous to physical health. However, there are some research studies that have shown direct or indirect *psychological effects* of these forms of pollution as well. It has to be understood that in general, any form of environmental pollution may affect the nervous system because of the presence of toxic substances and, to that extent, influence

psychological processes in some way. Another form of influence is seen in the emotional reactions to pollution which, in turn, create discomfort, and have consequences such as decreased work efficiency, lowered interest in the job, and increase in anxiety level. People do not like to live or work in a locality that is littered with garbage, or has a constant foul smell. Similarly, the presence of dust particles, or other suspended particles, may give a feeling of suffocation and difficulty in breathing, and may actually lead to respiratory disorders. People who experience this kind of discomfort cannot pay full attention to their work, or be in a pleasant mood.

Specific psychological effects of air pollution have been reported by some researchers. For example, in one part of Kolkata, the psychological reactions to air pollution were compared between a group living in an industrial area, and a group living in a non-industrial residential area. Those living in the industrial area reported greater tension and anxiety than those living in a non-industrial residential area. In a study conducted in Germany, the presence of pollutants such as sulphur dioxide in the air was found to decrease the ability to concentrate on a task, and lowering performance efficiency.

Pollution caused by leaks of dangerous chemical substances can cause other kinds of harm. The infamous Bhopal gas tragedy of December 1984 that claimed many lives, also left behind psychological effects because of the gas. Many of those who had inhaled the poisonous gas, methyl-isocyanate (MIC) along with other substances, showed disturbances in memory, attention and alertness.

There can be harmful air pollution in the home and office environment (indoor environments) also. For example, tobacco smoke pollution, that is, pollution through cigarette, cigar or *beedi* smoking, can also cause psychological effects. Such effects are supposed to be more dangerous for the smoker; however, those who inhale tobacco smoke (passive smoking) can also suffer the negative effects. One researcher found that inhaling tobacco smoke can increase the aggression level of individuals.

The presence of polluting substances in water and soil are hazardous for physical health. Some of these chemicals can also have damaging psychological effects. The presence of specific chemicals such as lead can cause mental retardation by affecting brain development. Such toxic substances affect human beings through various routes, i.e. through water, or through soil by being absorbed by vegetables grown in polluted soil.

Another source of toxicity is household and industrial waste, or garbage, which are non-biodegradable. Common examples of such waste are plastics, tin or any metal container. This kind of waste material should be destroyed or burned through special techniques, and the smoke should not be allowed to escape into the air that people breathe.

In general, there is sufficient evidence to show that toxic chemicals in the air, water and soil may lead to harmful effects not only on normal psychological functioning, but may also cause serious mental disorders. Therefore, there is absolutely no doubt that all forms of pollution need to be curbed.

Crowding

Most of us are familiar with crowds, which are large informal groups of persons coming together temporarily without any particular goal. For example, when a famous person suddenly appears on the road, people who are present in the situation at the time often collect around the scene, just to watch this person. But **crowding** has a different meaning. It refers

to a feeling of discomfort because there are too many people or things around us, giving us the experience of physical restriction, and sometimes the lack of privacy. Crowding is the person's reaction to the presence of a large number of persons within a particular area or space. When this number goes beyond a certain level, it causes stress to individuals caught in that situation. In this sense, crowding is another example of an environmental stressor.

The experience of crowding has the following features :
• Feeling of discomfort,
• Loss or decrease in privacy,
• Negative view of the space around the person, and
• Feeling of loss of control over social interaction.

The psychological consequences of crowding in our country have been systematically studied by several Indian psychologists in many Indian cities such as Allahabad, Ahmedabad, Pune, Varanasi, and Jaipur as well as some rural areas of Rajasthan. Some of these research investigations of crowding have been conducted in the psychology laboratory, but many more have been carried out in commonly encountered settings such as households, offices, traffic, public transport such as autorickshaw, cinema halls, etc. The large population of our country makes crowding much more here than in other less populated countries. This feature has prompted some foreign psychologists to study the effects of crowding in India.

It should be understood that the experience of crowding is brought about not merely because of the large number of persons as such, nor merely because of the shortage of space. It is related to **density**, that is, the number of persons within the available space. For example, if there are fifteen persons trying to squeeze into four seats in a railway compartment, each person is likely to experience crowding. Place the same fifteen persons in a large hall, and nobody experiences crowding.

One may ask : Is crowding always experienced in high density settings, and do all people experience its negative effects to the same extent? If you answered both questions by saying 'no', you are right. When we go to a fair (*mela*) or a wedding ceremony, usually the physical setting has high density, and we enjoy it in that form. After all, what is a *mela* or wedding ceremony if there are very few people? On the other hand, if there are many people sharing a small room, everyone feels uncomfortable.

The stressful effects of crowding can be completely understood only when we look into its consequences. A summary is given below of the effects of crowding and high density as reported in several research studies conducted in India and other countries.
• Crowding and high density may lead to *abnormal behaviour* and *aggression.* This was shown many years ago in a study of rats. These animals were placed in an enclosure, initially in small numbers. As their population increased within this enclosed space, they started showing aggressive and unusual behaviour, such as biting the tails of other rats. This aggressive behaviour increased to such an extent that ultimately the animals died in large numbers, thus decreasing the population in the enclosure. Among human beings also, an increase in population has sometimes been found to be accompanied by an increase in violent crime.
• Crowding leads to lowered performance on difficult tasks that involve cognitive processes, and has adverse effects on memory and the emotional state. These

negative effects are seen to a smaller extent in people who are used to crowded surroundings.

- Children growing up in very crowded households show lower academic performance. They also show a weaker tendency to continue working on a task if they are unsuccessful at it, compared to children growing up in non-crowded households. They experience greater conflict with their parents, and get less support from their family members.

- The *nature of social interaction* determines the degree to which an individual will react to crowding. For example, if the interaction is on a happy social occasion, such as a party or public celebration, the presence of a large number of persons in the same physical setting may cause no stress at all. Rather, it may lead to positive emotional reactions. At the same time, crowding, in turn, also influences the nature of social interaction.

- Individuals differ in the degree to which they show negative effects of crowding, and also in the nature of these reactions. Two kinds of tolerance can be mentioned that may explain these individual differences, i.e. **crowding tolerance** and **competition tolerance**.

  Crowding tolerance refers to the ability to mentally deal with a high density or crowded environment, such as a crowded residence (a large number of persons within a small room). People who are used to an environment containing many persons around them (for example, individuals growing up in a large family that lives in a small house) develop more crowding tolerance than people who are used to only a few persons around them. Our country has a large population and many people live with large families in small houses. This might lead us to expect that Indians in general should have more crowding tolerance than people from other, less populated countries.

  Competition tolerance is the ability to put up with a situation in which individuals would have to compete with many others for even basic resources, including physical space. Since there is a greater possibility of competition for resources in a crowded setting, the reaction to that setting would be influenced by the extent of tolerance for competition for resources.

- *Cultural characteristics* may determine the extent to which a particular environment is judged to be subjectively more crowded or less crowded. They may also affect the nature and extent of negative reactions to crowding. For example, in cultures that emphasise the importance of the group or collectivity over the individual, the presence of a large number of people in the surroundings is not taken as an undesirable state. On the other hand, in cultures that emphasise the importance of the individual over the group or collectivity, the presence of many other persons in the environment around us may make us uncomfortable. Overall, though, regardless of whether the culture considers the group more important than the individual, or the other way round, it is clear that in all cultures, crowding is experienced as being stressful.

- **Personal space**, or the comfortable physical space one generally likes to maintain around oneself, is affected by a high density environment. In a crowded context, there is a restriction on personal space, and this can also be a cause of negative reactions to crowding.

We find many examples of people responding to the physical environment in

terms of space. In social situations, human beings like to maintain a certain physical distance from the person with whom they are interacting. This is called **interpersonal physical distance**, and is a part of a broader concept called personal space, i.e. the physical space we like to have all around us. One reason for the negative reactions to crowding, as described earlier, is the decrease in personal space. Personal space can vary between people, between situations and settings, and between cultures. Some average distances have been observed in certain cultures. Edward Hall, an anthropologist, mentioned four kinds of interpersonal physical distance, depending on the situation:

- *Intimate distance* (upto 18 inches) : The distance you maintain when you are talking privately to someone, or interacting with a very close friend or relative.
- *Personal distance* (18 inches to 4 feet) : The distance you maintain when you are interacting one-to-one with a close friend, relative, or even with someone not very close to you in a work setting or other social situation.
- *Social distance* (4 to 10 feet) : The distance you maintain when the interaction is formal, and not close.
- *Public distance* (10 feet to infinity) : The distance you maintain in a formal setting, where there is a large number of persons. For example, the distance of an audience from a public speaker, or a teacher in a classroom.

It may be noted that these distances are maintained *voluntarily*, keeping in mind the comfort experienced by the persons involved in the interaction. However, when there is a shortage of space, people are forced to maintain much smaller physical distance from each other (for instance, in

a lift, or in a train compartment where there are too many people). In such cramped spaces, an individual is likely to feel crowded, even though objectively, the number of persons is not very large. In short, people react to available space as a part of the physical environment. When freedom of movement, the sense of privacy, and personal space cannot be maintained normally, the person experiences stress and responds negatively — with a bad mood, or aggressively, and tries to leave the situation as soon as possible.

The concept of personal space is important for the following reasons. *First*, it explains many of the negative effects of crowding as an environmental stressor. *Second*, it tells us about social relation-ships. For example, two persons sitting or standing close together are seen to be friends or related to each other. When you visit your school library, and if your friend is sitting at a table and the place next to her/him is empty, you like to sit next to her/him. But if a person you do not know is sitting at the table, even if the place next to her/him is empty, it is unlikely that you will sit next to this person. *Third*, it gives us some idea about how physical space can be modified in order to reduce stress or discomfort in social situations, or to make social interaction more enjoyable and fruitful.

Here are some simple examples. Suppose the staff in your school have to decide how to arrange chairs when (i) there is a social event, such as a cultural programme, (ii) there is a meeting between parents and teachers, and (iii) some guest speakers have been invited to address the students and teachers. Should the arrangement of chairs be the same in all three situations? You will find out more about what kind of seating arrangement people choose in non-crowded settings if you conduct Activity 8.1.

What Kind of Seating Arrangements Do People Prefer?

*Show the following diagrams, **A**, **B**, and **C** to 5 persons you know, and ask them where they would like to sit by writing '**P**' in that place. [The '**X**' in these pictures indicates the person who is already sitting there.]*

Note the places chosen by these 5 persons. Do these persons choose the same places? You may repeat this exercise by comparing the chosen places, when, in diagram A, X is a friend, in diagram B, X is someone you do not know, and in diagram C, X is someone you know well.

A. *X is your friend : you are joining her/him for tea in the canteen.*

B. *X is someone you do not know well, and you have to do some work with her/him as a team member.*

C. *X is someone you know well, both of you are participating in a competition, and each one wants to win.*

Where would you like to sit? Indicate by writing 'P' in the chosen place.

Diagram A

X

Diagram B

X

Diagram C

X

Natural Disasters

Environmental stressors such as noise, various forms of pollution and crowding are the result of human behaviour. By contrast, natural disasters are stressful experiences that are the result of nature's fury, i.e. the consequence of disturbances in the natural environment. Common examples of natural disasters are earthquakes, tsunamis, floods, cyclones, and volcanic eruptions. One finds examples of other disasters also, such as wars, industrial accidents such as the leaking of poisonous or radioactive elements in industrial plants, or epidemics (e.g., the plague that affected some parts of our country in 1994). However, wars and epidemics are human-made events, although their effects can also be as severe as those of natural disasters. These events are called 'disasters' because they cannot be prevented, usually come without any warning, and result in immense damage to human lives and property. Sadly, they also lead to a psychological disorder, called post-traumatic stress disorder (PTSD). Science and technology have now progressed sufficiently to make it possible for human beings to predict these events, to some extent. Yet the psychological effects of natural disasters need to be understood and remedied.

What are the effects of natural disasters? First, they leave people poverty-stricken, homeless, without any resources, usually along with a loss of everything they owned. Second, the sudden loss of all their belongings as well as their dear ones leaves people shocked and stunned. This is sufficient to create a deep-seated psychological disorder. Natural disasters are **traumatic experiences**, i.e. emotionally wounding and shocking to those who survive the disaster. Post-traumatic stress disorder (PTSD) is a severe psychological problem that results from traumatic events such as natural

disasters. This disorder has the following features.

- The *immediate reaction* to a disaster is commonly one of disorientation. People take some time to understand the full meaning of what the disaster has done to them. They may actually deny to themselves that something terrible has happened. Following the immediate reaction are the physical reactions.
- *Physical reactions*, such as bodily exhaustion even without physical activity, difficulty in sleeping, change in the eating pattern, increased heartbeat and blood pressure, and getting startled easily can be found among the victims.
- *Emotional reactions*, such as grief and fear, irritability, anger ("Why should this happen to me?"), helplessness, hopelessness ("I could do nothing to prevent this event"), depression, sometimes absolute lack of emotion (numbness), guilt feelings for having survived while someone else in the family died, blaming oneself, and lack of interest in even routine activities.
- *Cognitive reactions*, such as worry, difficulty in concentration, reduced span of attention, confusion, loss of memory, or vivid memories that are unwanted (or nightmares of the event).
- *Social reactions*, such as withdrawal from others, getting into conflict with others, having frequent arguments with even loved ones, and feeling rejected or left out. Surprisingly, very often, in the midst of severe emotional reactions to stress, some survivors may actually help in the healing processes. Having been through the experience, yet survived it and staying alive, these persons may develop a positive outlook on life and, with empathy, pass on this attitude to other survivors.

These reactions may last for a long time, in some cases throughout life. However,

with proper counselling and psychiatric treatment, PTSD can be remedied at least upto a level where the victims can be motivated, and helped to start life afresh. The poor, women who have lost all their relatives, and orphaned children who are survivors of natural disasters need special treatment and care. As in the case of the other environmental stressors, people react with different intensities to natural disasters. In general, the intensity of reaction is affected by :

- The severity of the disaster, and the loss incurred (both in terms of property and life),
- The individual's general coping ability, and
- Other stressful experiences before the disaster. For example, people who have experienced stress before may find it more difficult to deal with yet another difficult and stressful situation.

Although we are aware that most natural disasters can be predicted only in a limited way, there are ways of being prepared to minimise their devastating consequences in the form of (a) warnings, (b) safety measures that can be taken immediately after the event, and (c) treatment of psychological disorders. These measures, usually taken at the community level, are described below.

- **Warnings** : If you have been listening to the radio in the recent past, you might have heard advertisements that mention what people should do when it is announced that some natural disaster, such as a flood, is likely. When cyclones or high tides are predicted, fishermen are asked not to venture into the sea.
- **Safety measures** : Unfortunately, in the case of some natural disasters such as earthquakes, even if prediction is possible, the events come too suddenly for people to be warned or to be mentally prepared. Therefore, tips are

given beforehand about what to do when there is an earthquake.

• **Treatment of psychological disorders** : This includes self-help approaches as well as professional treatment. Often, the very first step involves *providing material relief* in the form of food, clothing, medical help, shelter, and financial help. *Counselling* at the individual and group level is the next step. This can take many forms, such as encouraging the survivors to talk about their experiences and emotional state, and giving them time for their emotional wounds to heal. According to some experts who deal with PTSD, one of the key attitudes to be developed in the survivors is that of **self-efficacy**, i.e. the belief that 'I can do it!', or 'I can come out of this phase successfully.' *Psychiatric help* may be needed for those showing extreme stress reactions. Finally, *rehabilitation* in the form of employment and a gradual return to the normal routine should be undertaken. At some stage, *follow-up* of the victims and survivors is also needed in order to ensure that they have, indeed, recovered sufficiently from their traumatic experience.

Activity 8.2	*Ask your teacher to help you to conduct the following role play, along with your classmates. Some students enact the role of victims of a natural disaster, showing symptoms of PTSD, while some others enact the role of counsellors. Get the opinions of your classmates and teacher about the behaviour shown by the counsellors.*

It may be pointed out that although pollution due to noise, air and water is now here to stay, some practices on the part of the community can go a long way in making our precious environment less polluted and healthier for all of us. With regard to crowding, it is entirely a human-made problem. Natural disasters, of course, are beyond human control. Yet one can take the necessary precautions. Some thoughts regarding environment-friendly behaviour are stated in the next section.

PROMOTING PRO-ENVIRONMENTAL BEHAVIOUR

Pro-environmental behaviour includes both actions that are meant to protect the environment from problems, and to promote a healthy environment. Some promotive actions to protect the environment from pollution are :

• *Reducing air pollution* by keeping vehicles in good condition, or changing to non-fuel driven vehicles, stopping the practice of smoking.

• *Reducing noise pollution* by ensuring that noise levels are low, for example, discouraging needless honking on the road, or making rules regarding noisy music at certain hours.

• *Managing disposal of garbage sensibly*, for example, by encouraging separation of biodegradable garbage from non-biodegradable waste, or composting of kitchen waste. These practices need to be adopted both at home and in public places. Special attention has to be paid to the management of industrial and hospital waste.

• *Planting trees and ensuring their care*, keeping in mind that those plants and trees should not be planted that have adverse health effects.

• *Saying 'no' to plastics in any form,* thus reducing toxic wastes that pollute water, air and the soil.

• *Reducing the non-biodegradable packaging of consumer goods.*

• *Laws related to construction (especially in urban areas) that violate optimal environmental design.*

If you ask someone to list the main problems that our society faces today, you can be fairly sure that two problems will be mentioned, among others — *poverty* and *violence*. Both of these phenomena have noticeable effects on the physical as well as psychological health of people. It has to be understood that poverty is not merely an economic problem, and violence is not merely a question of breaking the law. Rather, these problems can be resolved only if we examine their psychological causes. Psychologists have actively explored these issues, and have focused on the causes and consequences of these phenomena. Each of these social concerns is discussed below.

Poverty and Discrimination

Everyone agrees that poverty is a curse on society, and the more quickly we get rid of it, the better it will be for society. Some experts define **poverty** mainly in economic terms, and measure it in terms of income, nutrition (the daily calorie intake per person), and the amount spent on basic necessities of life such as food, clothing and shelter. Some other indicators are also used, such as physical health and literacy. Such measures continue to be used in some contexts. However, from the social and psychological points of view, economic and other physical aspects tell only a small part of the story about poverty. From the socio-psychological point of view, the most commonly accepted definition of poverty is that it is a condition in which there is a lack of necessities of life in the context of unequal distribution of wealth in society.

Some authors add that the sense of **deprivation** and **social disadvantage** are additional features of poverty. A distinction between deprivation and poverty is that deprivation refers to the state in which a person feels that s/he has lost something valuable, and is not getting something what s/he deserves. Poverty refers to an actual shortage of the resources necessary for living, and thus can be somewhat objectively defined. In deprivation, it is more a question of perceiving or thinking that one has got less than what one should have got. Thus, a poor person may experience deprivation, but poverty is not a necessary condition for experiencing deprivation. The situation of the poor is worsened if they also experience deprivation. In reality, usually the poor also feel deprived.

Both poverty and deprivation are linked to social disadvantage, i.e. a condition because of which some sections of society are not allowed to enjoy the same privileges as the rest of society. Social disadvantage poses an obstacle to the growth of these sections. In our society, the caste system has been largely the source of social disadvantage, but poverty, irrespective of caste, has also played a role in creating social disadvantage.

Further, social disadvantage because of caste and poverty has created the problem of **discrimination**. You may recall from Chapters 6 and 7 that discrimination is often linked to prejudice. In the context of poverty, discrimination refers to the behaviour that makes a distinction between the rich and the poor, favouring the rich and the advantaged over the poor and the disadvantaged. This distinction can be seen in matters of social interaction, education, and employment. Thus, even if the poor or disadvantaged have the capability, they are kept away from opportunities that are enjoyed by the rest of society. The children of the poor do not get a chance to study in good schools, or get good health facilities, and employment. Social disadvantage and discrimination prevent the poor from improving their socio-economic condition through their

own efforts, and this makes the poor even poorer. In short, poverty and discrimination are related in such a way that discrimination becomes both a cause and a consequence of poverty. Clearly, discrimination based on poverty or caste is socially unjust, and has to be removed.

Every society wishes to do away with poverty. To proceed in this direction, it is important to know the psychological dimensions of poverty and deprivation, and their major causes.

Psychological Characteristics and Effects of Poverty and Deprivation

Considering that poverty and deprivation are among the glaring problems of our society, Indian social scientists, including sociologists, psychologists and economists, have undertaken systematic research on the poor and deprived sections. Their findings and observations show that poverty and deprivation do have adverse effects on *motivation*, *personality*, *social behaviour*, *cognitive processes*, and *mental health*.

- In terms of motivation, the poor have low aspirations and low achievement motivation, and high need for dependence. They explain their successes in terms of luck or fate rather than ability or hard work. In general, they believe that events in their lives are controlled by factors outside them, rather than within them.
- With regard to personality, the poor and deprived have low self-esteem, are high on anxiety and introversion, and dwell on the immediate present rather than being future-oriented. They prefer smaller immediate rewards to larger rewards in the long run, because in their perception, the future is too uncertain. They live with a sense of hopelessness, powerlessness, felt injustice, and experience a loss of identity.

- With respect to social behaviour, the poor and deprived sections exhibit an attitude of resentment towards the rest of society.
- Among the effects of prolonged deprivation on cognitive functioning, it has been found that intellectual functioning and performance on tasks (such as classification, verbal reasoning, time perception, and pictorial depth perception) is lower among the highly deprived compared to those who are less deprived. It has also been clarified that the effect of deprivation is because the nature of the environment in which children grow up — whether it is enriched or impoverished — makes a difference in their cognitive development, and this is reflected in cognitive task performance.
- With regard to mental health, there is an unquestionable relationship between mental disorders and poverty or deprivation. The poor are more likely to suffer from specific mental illnesses compared to the rich, possibly due to constant worriness about basic necessities, feelings of insecurity, or inability to get medical facilities, especially for mental illnesses. In fact, it has been suggested that depression may be a mental disorder largely of the poor. Besides, the poor experience a sense of hopelessness and a loss of identity, as though they do not belong to society. As a result, they also suffer from emotional and adjustment problems.

Major Causes of Poverty

Poverty is sometimes caused by natural disasters such as earthquakes, floods, and cyclones, or man-made disasters such as poisonous gas leaks. When such events take place, people suddenly lose all their possessions and have to face poverty.

Similarly, one generation of the poor may be unable to eradicate their poverty, and the next generation continues to remain in poverty. Apart from these causes, other factors responsible for poverty have been mentioned below. However, there are some differences of opinion regarding the importance of these factors.

- The poor themselves are responsible for their poverty. According to this view, the poor lack the ability and motivation to put in effort, and make use of available opportunities. In general, such a view about the poor is rather negative, and does not help at all in making them better.
- It is not the individual, but a belief system, a way of life, and values, in which she/he is brought up, that is the cause of poverty. This belief system, called the '**culture of poverty**', convinces the person that she/he will continue to remain poor, and the belief is carried over from one generation of the poor to the next.
- Economic, social and political factors together account for poverty. Because of discrimination, certain sections of society are denied the opportunities needed for getting even the basic necessities of life. The economic system is made to grow in a disproportionate way, through social and political exploitation, so that the poor are left out of the race. All these factors can be summed up in the idea of social disadvantage, because of which the poor experience social injustice, deprivation, discrimination, and exclusion.
- The geographic region in which one lives is said to be a significant cause of poverty. For example, people living in regions (such as deserts) that have a shortage of natural resources and a harsh climate (such as extreme heat or cold) end up being poor. This factor cannot be controlled by human beings.

However, attempts can be made to help people in such regions to find alternative means of livelihood, and to provide special facilities for their education and employment.

- The **poverty cycle** is another important cause of poverty that explains why poverty tends to continue among the same sections of society. Poverty begets poverty. Beginning with a low income and lack of resources, the poor go through low health and nutrition, lack of education, and lack of skills. This leads to low employment opportunities, which, in turn, continue their low income condition, and low health and nutrition status. The resulting lowered motivational level only makes the situation worse; the cycle starts and continues again. Thus, the poverty cycle involves an interaction between the factors mentioned above, and results in declining individual motivation, hope, and sense of control.

The only way to tackle the problems associated with poverty and deprivation is to work actively as well as earnestly towards the removal or reduction of poverty. Some measures in that direction are described below.

Measures for Poverty Alleviation

Several steps are being taken by the government and other groups to work towards alleviation or reduction of poverty and its negative consequences.

- Breaking the poverty cycle, and helping the poor to attain self-sufficiency — Initially, financial relief, medical and other facilities may have to be provided to the poor. Care should be taken to see that this financial and other help does not make the poor dependent on these sources for their livelihood.
- Creating a context for making the poor take responsibility instead of blame for

their poverty — This step will help them to regain a sense of hope, control and identity.

- Providing educational and employment opportunities, following the principles of social justice — This step may help the poor to discover their own abilities and skills, thus enabling them to come up to the level of other sections of society. This will also help in reducing crime and violence by reducing frustration, and by encouraging the poor to earn their livelihood through legal rather than illegal means.
- Measures for improved mental health — Many of the poverty reduction measures help to improve the physical health of the poor, but their mental health still remains a problem to be tackled effectively. With greater awareness of this problem, it is hoped that more attention will be paid to this aspect of poverty.
- Steps for empowering the poor — Through the measures mentioned above, the poor should be made more powerful, capable of living independently and with dignity, without depending on the help given by the government or other groups.

The concept of *'Antyodaya'*, or the rise of the 'last person' in society, i.e. the poorest or the most disadvantaged, has helped a large section of the poor to get uplifted to a better economic condition than they have experienced earlier. Under *Antyodaya* programmes, there is provision for health facilities, nutrition, education and training for employment — all the areas in which the poor need help. Many of these programmes are more active in rural than in urban regions, as the rural poor have even fewer facilities than the urban poor. In addition, the poor are encouraged to start their own small-scale businesses. Initial capital for these ventures is provided through small loans or micro-credit facilities. This facility is similar to the idea of the Grameen Bank in Bangladesh.

Following the 73rd amendment of the Constitution, the aim is to give more power to people for their development through decentralised planning, and through people's participation. ActionAid, an international group dedicated to the cause of the poor, has goals of making the poor more sensitive to their rights, to equality and justice, and ensuring for them adequate nutrition, health, and facilities for education and employment. The Indian branch of this organisation has been working for poverty alleviation in our country.

These measures cannot be expected to have magical effects in a short time. But, if these efforts towards poverty alleviation are continued in the right spirit and right direction, we may see positive results in the very near future.

> *You must have heard the proverb, 'A bird in hand is worth two in the bush'.*
>
> *Would people experiencing poverty 'Agree' or 'Disagree' with this proverb? Why? Discuss in class with your teacher.*

Activity 8.3

Aggression, Violence and Peace

Aggression and violence are among the major problems in today's society, and they cover a wide range of behaviours — from ragging of newcomers in educational institutes, through child abuse, domestic violence, murder and rape, to riots and terrorist attacks.

Psychologists use the term '**aggression**' to refer to any behaviour by one person/persons that is intended to cause harm to another person/persons. It can be demonstrated in actual action or through the use of harsh words or criticism, or even

hostile feelings against others. Forceful destructive behaviour towards another person or object is described as **violence**. Some psychologists distinguish aggression from violence by pointing out that aggressive behaviour involves the intention to harm or injure another person, whereas violence may or may not involve such an intention. For example, burning buses or other public property during a riot is called violence as well as aggression. But, suppose you see a person kicking a motorbike violently. Her/his intention may be only to start the vehicle and, therefore, this act will not be considered a case of aggression. On the other hand, the person may also perform the violent act in order to damage the vehicle, because it belongs to a person s/he dislikes. In this case, because harm was intended, the act would be called a case of aggression.

A distinction is also made between **instrumental aggression** and **hostile aggression**. In instrumental aggression, the act of aggression is meant to obtain a certain goal or object. For example, a bully slaps a new student in school so that s/he can snatch the newcomer's chocolate. Hostile aggression is that which is shown as an expression of anger towards the target, with the intention of harming her/him, even if the aggressor does not wish to obtain anything from the victim. For example, a criminal may beat up a person in the community for mentioning his name to the police.

Causes of Aggression

Social psychologists have explored the issue of aggression for several years, and have come up with the following views about the causes of aggression.

1. *Inborn tendency* : Aggressiveness is an inborn tendency among human beings (as it is in animals). Biologically, this inborn tendency may be meant for self-defence.

2. *Physiological mechanisms* : Aggression could also be indirectly triggered by physiological mechanisms, especially by the activation of certain parts of the brain that play a role in emotional experience. A general physiological state of arousal, or feeling activated, might often be expressed in the form of aggression. There could be several factors that cause arousal. For example, as was seen earlier in this chapter, aggression can result from a sense of crowding, especially in hot and humid weather.

3. *Child-rearing* : The way an individual is brought up often influences her/his aggressiveness. For example, children whose parents use physical punishment end up becoming more aggressive than children whose parents use other disciplinary techniques. This could be because the parent has set an example of aggressive behaviour, which the child imitates. It could also be because physical punishment makes the child angry and resentful; as the child grows up, s/he expresses this anger through aggressive behaviour.

4. *Frustration* : Aggression is an expression, and consequence of frustration, i.e. an emotional state that arises when a person is prevented from reaching a goal, or attaining an object that s/he wants. The person may be very close to the goal, and yet does not attain it. It has been found that people in frustrated situations show more aggression than those who are not frustrated. In one of the experiments conducted to examine the effects of frustration, children were prevented from getting some attractive toys that were visible through a screen. As a result, these children were found to be more destructive in play than those children who were allowed access to toys.

An American psychologist, John Dollard along with his collaborators, conducted research specifically to examine the **frustration-aggression theory**. This theory proposes that it is frustration that leads to aggression. As expected, frustrated persons did demonstrate more aggression than non-frustrated persons. Moreover, such aggression was often shown towards a weaker person who was unlikely, or unable, to react to the aggression. This phenomenon has been called **displacement**. Often it is observed that members of a majority group in society may be prejudiced (Chapter 6) against members of a minority group, and may show aggressive behaviour towards a minority group member, such as using abusive language, or even physically assaulting the minority group member. This may be a case of displaced aggression arising out of frustration.

Later on, as more information was gathered about the causes of aggression, it became clear that frustration is not the only, or even a major cause of aggression. Observations showed that (i) being frustrated does not necessarily make a person aggressive, and (ii) many other situational factors may lead to aggression. Some of these situational factors are described below.

- *Learning :* Among human beings, aggression is largely the result of learning rather than an expression of an inborn tendency. Learning of aggression can take place in more than one mode. Individuals may exhibit aggression because they have found it rewarding (for example, hostile aggression allows the aggressive person to get what s/he wants). This would be a case of learning through direct reinforcement. Individuals also learn to be aggressive by observing others showing aggression. This is a case of learning through **modelling**.

- *Observing an aggressive model :* Many research studies conducted by psychologists such as Albert Bandura and his collaborators show the role of modelling in learning aggression. If a child observes aggression and violence on television, s/he may start imitating that behaviour. Without doubt violence and aggression shown on television and the film media have a powerful influence on the viewers, especially the children. But the question is : Does merely seeing violence on television make a person aggressive? Or are there other situational factors that actually make a person show aggression? The answer is obtained through information about specific situational factors.

- *Anger-provoking action by others :* If a person watches a movie that shows violence, and is then made to feel angry (for example, through insults or threats, physical aggression, or dishonesty) by another person, s/he may be more likely to show aggression than if s/he is not made to feel angry. In studies that tested the frustration-aggression theory, provoking the person and making her/him angry was one way of inducing frustration.

- *Availability of weapons of aggression :* Some researchers have found that observing violence leads to a greater likelihood of aggression on the part of the observer only if weapons of aggression like a stick, pistol or knife are easily available.

- *Personality factors :* When interacting with people we notice that some of them seem to be 'naturally' more hot-tempered, and show more aggression than others. We may conclude that aggressiveness is thus a personal quality. It has been observed that people who have very low self-esteem and feel insecure may behave aggressively in order to 'boost their ego'.

Likewise, people who have very high self-esteem may also show aggression, because they feel that others do not place them at the high 'level' at which they have placed themselves.

- *Cultural factors :* The culture in which one grows up can teach its members to be aggressive or not by encouraging and praising aggressive behaviour, or discouraging and criticising such behaviour. Some tribal communities are traditionally peace-loving, whereas others see aggression as necessary for survival.

Reducing Aggression and Violence : Some Strategies

Knowing that aggression can have more than one cause, can anything be done to reduce aggression and violence in society? Some of the remedies suggested for curbing violence and aggression are described below. It may not be easy to ensure a society or environment that is free from frustrating situations. However, the learning of aggression can be curtailed by creating the appropriate attitude towards the general problem of growing aggression.

- Parents and teachers should be specially careful not to encourage or reward aggression in any form. The use of punishment to bring about discipline also needs to be changed.
- Opportunities to observe and imitate the behaviour of aggressive models should be reduced drastically. Portraying aggression as heroic behaviour should be particularly avoided, because this may set the stage for learning through observation.
- Poverty and social injustice may be a prominent cause of aggression, because they can cause frustration in certain sections of society. Implementing social justice and equality in society may help in reducing frustration levels and thereby curb aggressive tendencies at least to some extent.
- Apart from these strategies, at the level of the community or society, it is important to inculcate a positive attitude towards peace. We should not only reduce aggression, but should also

---

Mahatma Gandhi on Non-violence: Why Does Non-violence Work?

Box 8.2

"Non-violence is an active force of the highest order. It is the soul-force or the power of the Godhead within us. Imperfect man cannot grasp the whole of that Essence — he would not be able to bear its full blaze, but even an infinitesimal fraction of it, when it becomes active within us, can work wonders.

I am not a visionary; I claim to be a practical idealist. The religion of non-violence is not meant for the *rishis* or saints. It is meant for the common people as well. Non-violence is the law of our species as violence is the law of the brute …. The dignity of man requires obedience to a higher law — to the strength of the spirit. Non-violence does not require any outside or outward training. It simply requires the will not to kill even in retaliation and the courage to face death without revenge. This is no sermon on *ahimsa* but cold reason and the statement of a universal law. Given the unquenchable faith in the law, no provocation should prove too great for the exercise of forbearance.

With *satya* (truth) combined with *ahimsa* (non-violence), you can bring the world under your feet. *Satyagrah* in its essence is nothing but the introduction of truth and gentleness in the political, i.e. national life …. By its very nature, non-violence cannot seize power, nor can that be its goal. However, non-violence can do more; it can effectively control and guide power without capturing the machinery of government. That is its beauty."

actively develop and maintain peace. Our own cultural values have always favoured peaceful and harmonious co-existence. The father of our nation, Mahatma Gandhi, gave the world a new view on peace that was not simply the absence of aggression. This was the idea of **non-violence**, which he himself practiced throughout his life (see Box 8.2).

Health

Our understanding about health and well-being has undergone a major change in recent times. It is now conceded that various health outcomes are not only a function of disease but the way we think and behave. This finds reflection in the definition of 'health' provided by the World Health Organisation (WHO), which includes biological, psychological and social aspects of health. It focuses not only on physical but also on mental and spiritual aspects of health. We will concern ourselves with physical health in this section as you have already read about mental health in the previous chapters.

Health and illness are a matter of degree. One may be suffering from a physically disabling disease but may be quite healthy otherwise. You may recall the names of Baba Amte or Stephen Hawkins, both of whom suffer from crippling diseases but have made great contributions in their fields. We also find that people differ across cultures in their thinking about when and how people fall ill and, therefore, in the models which they use in prevention of diseases and promotion of health. There are traditional cultures like Chinese, Indian, and Latin American which hold that good health results from the harmonious balance of various elements in the body, and ill-health results when such a balance is lost. On the contrary, the Western cultures view health

as a result of fully functioning machine which has no blockage. The different systems of medicine developed in different cultures are based on these models. There is another fact that you may want to know. The World Health Reports by the WHO show that in developing countries such as in Asia, Africa, and Latin America, more people die due to communicable diseases including HIV/AIDS, tuberculosis (TB), malaria, respiratory infections, and nutritional deficiencies. In the developed countries, the leading causes are various cardiovascular diseases, cancers, and psychiatric disorders. Such differences may be explained in terms of how these societies are economically and socially structured and their psychological underpinnings.

At the individual level, psychologists point to various factors such as health-related cognitions including attitudes and beliefs, behaviours and social factors which are associated with physical well-being or illness.

(a) **Cognitions** : You may have observed how some people are quick to seek doctor's help while others do not if they are suffering from such symptoms as nausea, cold, diarrhoea, smallpox, etc. The variations in seeking help are due to differences in mental representations people make relating to disease, its severity and the causes of disease. One may not seek doctor's help for a cold if one attributes it to eating curd or for leprosy or smallpox if these are attributed to God's annoyance.

The level of awareness or information about disease; and beliefs about how it is caused; and about possible ways of relieving the distress or improving health affect help seeking behaviour as well as sticking to a doctor's regimen. Another factor which influences our help-seeking from a doctor is the perception of pain, which is a function of personality, anxiety and social norms.

(b) **Behaviour** : Psychologists have found strong evidence which shows that behaviours we engage in and our lifestyles greatly influence health. People differ greatly in terms of such behavioural risk factors as smoking or tobacco use, alcohol and drug abuse, and unsafe sexual behaviour, diet and physical exercise. It is well accepted now that such behaviours are associated with incidence of coronary heart disease (CHD), cancer, and HIV/AIDS besides many other diseases. A new discipline called **Behaviour Medicine** has emerged, which seeks to alleviate stress due to diseases through modification in behaviour.

(c) **Social and cultural factors** : There is now a growing body of research which shows that social and cultural differences may influence our physiological responses, and may not be the same across all cultures. For instance, the relationship between hostility and anger and CHD is not found to be the same in all cultures, (e.g., in India and China). While interaction between culture and physiological responses requires more evidence, social and cultural norms associated with roles, and gender, etc. greatly influence our health behaviour. In Indian society, medical advice by or for a female is often delayed because of various reasons — they are less valued, or because of the belief that they are hardy, or the shame associated with the disease.

Impact of Television on Behaviour

There is no doubt that television has been a useful product of technological progress. However, from the point of its psychological impact on human beings, both positive and negative effects have been observed. Many research studies have inquired into the effects of television viewing on cognitive processes and social behaviour, especially in Western cultures. Their findings show a mixed impact. Most of the research studies have been carried out on children because they are seen as being more vulnerable to the impact of television than adults.

First, television provides a large amount of infotainment in an attractive form, and in the visual mode, for which it became a powerful medium of instruction. At the same time, because the programmes are attractive, children spend huge amounts of time watching them. This reduces their habit of reading and writing, and also their outdoor activities such as playing.

Second, television watching may have an effect on children's ability to concentrate on one target, their creativity and ability to understand, and also their social interactions. On one hand, there are excellent programmes that emphasise positive interpersonal attitudes and provide useful factual information, teaching children how to design and construct certain objects. On the other hand, these programmes may distract young viewers and interfere with their ability to concentrate on one target.

Third, about forty years ago a serious debate was raised in the USA and Canada regarding the effect of television viewing on aggressiveness and violence among the viewers, especially children. As discussed earlier in the context of aggression, the results of research showed that watching violence on television was, indeed, linked to greater aggressiveness in the viewers. If the viewers were children, they tended to imitate what they saw; they were not mature enough to think of the consequences of such behaviour. However, some other studies pointed out that merely watching violence on the television does not make children more aggressive. Other factors need to be present in the situation. Other research findings show that watching violence may actually reduce the

natural aggressive tendency of the viewers : what is 'bottled up' gets an outlet, and thus cleans the system, like a choked drainpipe being cleaned. This process is called **catharsis**.

Fourth, in the case of adults as well as children, it is said that a consumerist attitude has developed, and this is due to television watching. Numerous products are advertised, and it is very natural for the viewer to get carried away.

No matter how these results are interpreted, there seems to be sufficient evidence to pose a warning to unlimited television watching.

> **Activity 8.4**
>
> *Make a list of all those pieces of information that you obtained by watching TV in the last one week, and write down the answers to the following questions :*
>
> *Which shows did you watch?*
>
> *Which pieces of information indicate a positive form of behaviour, and which ones indicate a negative form?*

Key Terms

Aggression, Air pollution, Communicable diseases, Competition tolerance, Crowding tolerance, Crowding, Disaster, Displacement, Ecology, Environment, Environmental psychology, Instrumental perspective, Modelling, Noise, Peace, Personal space, Physical environment, Post-traumatic stress disorders, Poverty alleviation, Poverty, Pro-environmental behaviour, Self-efficacy, Social Environment, Spiritual perspective, Transactional approach.

Summary

- *We take renewable and non-renewable resources from the physical environment to meet the needs of growing population, rapid industrialisation and human consumption. Undesirable human activities have altered the conditions in the environment that have resulted in pollution, noise, crowding and intensified the occurrence of natural disasters.*
- *The environmental crises and their solutions can be understood through transactional and traditional Indian approach.*
- *Pollution adversely affects our mental and physical health and psychological processes.*
- *Noise also adversely affects our thinking, memory and learning. The elevated sound levels can cause permanent hearing loss, increase heartbeat, blood pressure and muscle tension.*
- *Crowding is the psychological feeling of not having enough space available. Crowding negatively affects cognitive performance, interpersonal relationships, and physical and mental health.*
- *A natural disaster disrupts the normalcy within a society and causes damage, destruction and human suffering. In the aftermath of a disaster, post-traumatic stress disorder is the most common feature. Counselling the disaster-affected people and creating scope for collective activities can reduce such stress. Also, preparedness of individuals and communities to respond rapidly and effectively to possible disasters can lessen the adverse effects.*
- *Pro-environmental behaviour includes both actions that are meant to protect the environment from problems, and to promote a healthy environment.*
- *Social and psychological concerns arise out of vexed problems that affect a large segment of people in a society.*

- *Lower economic status entails poverty. It relates to deprivation and disadvantage. It adversely affects cognitive performance, personality and social behaviour. Many programmes are being implemented for social and economic empowerment of the poor.*
- *Aggression and violence are among the major problems in today's society. The learning of aggression can be curtailed by creating the appropriate attitude towards the general problem of growing aggression.*
- *Health is a state of complete physical, mental and social well-being. The challenge before the nation is to reduce communicable diseases like diarrhoea, tuberculosis and HIV/AIDS, and non-communicable diseases like anaemia, cancer, diabetes and stress-related disorders. Positive lifestyle habits can induce positive emotions, physical fitness and reduce the health problems.*
- *Both positive and negative effects of television viewing on human behaviour have been observed. Most of the research studies have been carried out on children because they are seen as being more vulnerable to the impact of television than adults.*

Review Questions

1. What do you understand by the term 'environment'? Explain the different perspectives to understand the human-environment relationship.
2. "Human beings affect and are affected by the environment". Explain this statement with the help of examples.
3. What is noise? Discuss the effects of noise on human behaviour.
4. What are the salient features of crowding? Explain the major psychological consequences of crowding.
5. Why is the concept of 'personal space' important for human beings? Justify your answer with the help of an example.
6. What do you understand by the term 'disaster'? List the symptoms of post-traumatic stress disorder. How can it be remedied?
7. What is pro-environmental behaviour? How can the environment be protected from pollution? Suggest some strategies.
8. How is 'poverty' related to 'discrimination'? Explain the major psychological effects of poverty and deprivation.
9. Distinguish between 'instrumental aggression' and 'hostile aggression'. Suggest some strategies to reduce aggression and violence.
10. Discuss the psychological impact of television viewing on human behaviour. How can its adverse consequences be reduced? Explain.

Project Ideas

1. Conduct a survey of 10 households in your locality. Prepare an interview schedule and meet the head of each household and ask: What pollutions do you experience? What are the effects of each pollution on the health of your family members? Summarise the data, and divide the health effects into physical and mental symptoms or diseases. Prepare a report and offer suggestions on how pollution can be abetted.
2. Conduct a survey of 20 elderly people in your locality to understand their social problems and their remedies. Prepare a list of the social problems, and write them on cards (4" × 4"). Request each elderly person to arrange the cards in order of priority, keeping the most important social problem first and the least important social problem last. Enter the rank in your schedule against each problem and ask the causes and remedies of each problem arranged on the card. Prepare a report and discuss it with your teacher.

Pedagogical Hints

1. Students could be asked to share their views, by giving real-life examples, on psychological effects of noise, pollution, crowding and natural disasters on human behaviour.

2. Students may be encouraged to think of various initiatives taken by the government and the NGOs working in the field of environment, while discussing the topic of promoting pro-environmental behaviour.

3. Teachers could adopt strategies like questions, stories, anecdotes, games, experiments, discussion, dialogues, examples, analogies, role-playing, etc. which are helpful in promoting peace-related values while transacting the contents of the chapter.

4. In the topic of psychology and social concerns, teachers should attempt to shift from mere imparting of information to debate and discussion. This approach to learning will keep the students alive to social realities.