



Figure 17.1 A model that relates stress, illness and health (based on suggestions given by Baum, 1994).

Although this model is very effective and useful in explaining several ways in which stress affects our health, it does not include all the ways in which stress may affect our health.

How to Cope with Stress?

Coping is considered as a cognitive and behavioural effort, which may help people in psychosocial adaptation with various stressful events. Thus, coping strategies are the activities that people can take to reduce or minimise the effects of stressors and they can include both psychological strategies and behavioural strategies. In very simple words, *coping* is a process of attempting to manage demands which are viewed as taxing or exceeding the resources (Lazarus and Folkman, 1984). There are three major coping strategies commonly followed by a person for reducing the adverse effects—*emotion focused coping*, where the person makes efforts to replace the negative emotions produced by stress with more positive ones; *problem-focused coping*, where the person makes efforts to alter the situation itself, that is, the cause of stress and *seeking social support*, where the person tries to draw on maximally the emotional task resources provided by others for reducing the adverse effect of stress. As said above, in *emotion-focused coping*, the person engages in all those activities that reduce the negative feelings and emotions produced by stress (Lazarus, 1993). Thus, in *emotion-focused coping*, an attempt is made to change the way a person feels or emotionally reacts to the stressor. This tends to reduce the emotional impact of stressors and makes it possible to deal with the problem effectively. Some of the common emotion-focused strategies are trying to perceive the situation in positive way (positive reappraisal), positive self-task, positive statements about writing about one's feeling and emotions in diary and so on. For example, if a person loses his job, he may decide that it is not a major tragedy because he will soon get still a challenge—an opportunity to get a better job with higher

Sharma (1999) analysed the role of family as support system. There have been found two mechanisms that explain how social support lessens the impact of stressors and promotes health and well-being. They are direct effect hypothesis and buffering effect hypothesis. Emotional support is more likely to produce a stress-buffering effect. Moreover, the efficacy of social support is likely to be dependent on the following five factors (Sharma, 1989):

1. Who is providing support?
2. What kind of support is provided?
3. To whom is the support provided?
4. When and for how long is the support produced?
5. What is the issue/problem for which the support is provided?

Recent findings have indicated that having a pet can also reduce the negative impact of stress (Allen, 2003). A study conducted by Allen, Shykoff and Izzo (2001) showed that the stockbrokers who had described their work as stressful and usually had high blood pressure, when were allowed to be with a pet, it provided an excellent source of social support. One reason of pets being effective in reducing the negative impact of stress is that they provide non-judgemental social support, that is, they love their owners in all situations.

One recent finding has suggested that providing social support rather than receiving social support is very important. Brown et al. (2003) conducted a study in which they compared the impact of giving and receiving social support on mortality in a group of 846 elderly married people. It was found that those participants, who provided high levels of support to others, were significantly less likely to die over a five-year period as compared to the participants, who had provided little or no support to others. However, receiving social support from others, including spouse, did not appear to influence mortality among participants. The study provided a hint that it is better to give than to receive social support, especially when it comes to relate to the illness and personal health.

Personal Factors, Health and Illness

All of us know that there is a large difference between personal health and illness. Some persons are rarely ill and go to doctor, while others suffer from frequent illnesses. Although there can be many factors, which are responsible for this, personal characteristics play an important role in promoting health and well-being. Some of these personal factors are hostility and anger, perfectionism, optimism and pessimism, psychological hardiness, social support and socio-economic status. We have already considered social support. Therefore, we shall concentrate upon the remaining ones.

1. Hostility and anger: Researches have supported the view that the individuals rated high on hostility and anger have been found to be at higher risk for heart disease than those who are rated low on anger and hostility. A study conducted by Niaura et al. (2002) revealed that high level of hostility is a better predictor of heart disease in older men. Smith (2003) reported that medical students showing high level of anger while under stress were more than three times more likely to develop premature heart disease and five times more likely to have an early heart attack, than those who were rated low on anger. Suarez (1998) conducted a study in which it was found that a person with higher level of hostility when angered by another person tended to display higher blood pressure, higher heart rate and other related physiological signs of high levels of stress in comparison to the persons, who were having a low level of hostility.

(iv) Since optimists experience less psychological stress, they have more effectively functioning immune systems than pessimists.

4. Psychological hardiness: Our common observation has been that some people under great stress succumb to illness, while others do not. Why so? Probably the answer lies in one unique characteristic of the people that is *psychological hardiness*, which is defined as a combination of three psychological qualities or attitudes, namely, commitment, challenge and control (three C's) shared by people, who can undergo high level of stress yet keep themselves healthy one. Kobasa (1979) did pioneer study in this field. She studied 670 male executives, who had symptoms of illness due to stressful life events in the preceding three years. She then administered personality questionnaires to 200 executives, who had high rank on both stress and illness and to 126, who had equally experienced stressful life events, but were having few symptoms of illness. In results, she found that high stress/low illness male subjects were more immersed in their social lives and work. They enjoyed challenge and had a better control over events than their high stress/high illness counterparts. Three years later, Kobasa et al. (1982) looked at the same executives. This time, their observation was that the high stress/low illness group remain healthy and retained their attitudes of commitment, challenge and control—three basic characteristics that Kobasa collectively called *hardiness*.

Now, the question is—why would these three characteristics lessen the negative impact of stress? Commitment forces the person to willingly make sacrifices and deal with hardships. Control empowers the person to look at stressful events not much harming as they can be put on hold. People with a sense of personal control typically cope more successfully with stressful events, even with those stressful events that are largely uncontrollable (Helgeson, 1992). Seeing events as challenges rather than as problems also tend to change the level of stress experienced (Ciccharelli and Meyer, 2006). Following Roth et al. (1989), a person having the characteristics of commitment, challenge and control generally possesses a cognitive style such that stressful life events are interpreted less negatively, and therefore, they are rendered less harmful.

5. Socio-economic status: Researchers have shown that there is an obvious link between socio-economic status and personal health. Overall, if a person belongs to higher level of socio-economic status, his personal health is better (Steenland, Henley and Thun, 2002). Indian researchers have also shown that persons in lower socio-economic status tend to display poor physical and mental health/well-being as indexed by various measures (Chaturvedi and Michael, 1993; Misra and Agrawal, 2003; Panjiyar and Rout, 1999; Srivastava and Bhatnagar, 2000). The reason for having better health in case of people of higher socio-economic status is that they have greater material resources than the persons lower in socio-economic status. Recent findings, however, raise another possibility that one important factor which may underline such difference is general intelligence. Persons belonging to the upper socio-economic status having higher intelligence know better about what it takes to be healthy and are more likely to put this knowledge to practical use than the persons who belong to lower socio-economic status. However, this conclusion awaits research support.

In this way, we find that several personal factors do have a direct impact upon health and illness of the person.

Promoting Healthy Lifestyles

In determining how long we live, many factors do play important roles. According to Perls and Silver (1999), some genetic factors do play a role in determining such longevity. They reported

2. Perfectionism: *Perfectionism* means a person's tendency to be perfect or nearly perfect in everything he does. Social psychologists have identified two different patterns of perfectionism—the *personal standards perfectionism* and *self-critical perfectionism*. In *personal standards perfectionism*, the person sets extremely and often unrealistically high standards for himself. In *self-critical perfectionism*, the person constantly engages in harsh criticism of their own actions, expresses an inability to derive satisfaction from successful performance and chronic concerns about other's criticism and expectation (Blankstein and Dunkley, 2002). Of these two patterns of perfectionism, self-critical perfectionism damages personal health and well-being. Persons characterised by self-critical perfectionism

- (i) Constantly blame themselves for everything
- (ii) Perceive that they cannot get social support from others when needed
- (iii) Perceive that other people are highly critical of them
- (iv) Always have doubt about their own ability to deal with the stressful live events

Due to these various characteristics, persons having the pattern of self-critical perfectionism generally experience negative feelings as well as feeling of helplessness. Consequently among them, the level of stress becomes high that affects their personal health.

3. Optimism and pessimism: People who are optimistic do have happy thoughts and generally cope more effectively with stress. Apparently, happy thoughts become healthy thoughts. Since optimistic people generally expect good outcomes, such positive expectations help in making them more stress-resistant than pessimists, who generally expect bad outcomes. Researches have shown that optimists are more likely to use problem-focused coping strategy, seek social support and find positive aspects of a stressful situation (Carver et al., 1993; Sheier and Carver, 1992). On the other hand, pessimists generally use denial or tend to focus on their stressful feelings (Sheier et al., 1986). In a study conducted by Sheier and Carver (1985), it was found that optimistic students reported fewer physical symptoms at the end of semester examination than those who were pessimistic. Thus, we find that being optimist one can have good personal health, whereas being pessimist one can damage his personal health.

Further researches have shown that optimists tend to live longer and have improved functioning of their immune system. Maruta et al. (2002) conducted a longitudinal study of optimists and pessimists over a period of 30 years. The results for pessimists were discouraging. Such people had much higher death rate than did the optimists and those who were still living had more problems with physical and emotional health than optimists. The optimists had a 50% lower risk of premature death and were calmer, peaceful and were leading a happy life than the pessimists. An earlier study conducted by Segerstorm et al. (1998) revealed that optimists were having higher level of helper cells and higher levels of natural killer cells. Seligman (2002), a social learning psychologist, outline the following four important ways in which optimism may affect longevity of a person:

- (i) Optimists are more likely than pessimists to take care of their personal health by preventive measures such as going to the doctor regularly and eating only right things.
- (ii) Optimists are less likely to develop learned helplessness—a tendency to stop trying achieve a goal that has been blocked in the past.
- (iii) Optimists are less likely to become depressed than pessimists. Depression lowers the functioning of immune system.

But recent researches have shown that environmental factors, especially our lifestyle, are more significant factors in determining the longevity of the person. A healthy lifestyle promotes personal health and well-being. Social psychologists are of view that a healthy lifestyle is one in which an individual avoids all those behaviours that are considered potentially harmful to his health (that is excessive use of alcohol, smoking, unprotected sex and unprotected exposure to burning sun) and seeks early detection and effective treatment of illness when it occurs. Researches done by Pomeroy et al. (1986) revealed that the first factor leading to premature death is unhealthy lifestyle, that is about 53.5% of death occurs due to unhealthy lifestyle. The role of healthy and unhealthy lifestyle in promoting health as well as illness was shown in one famous study conducted by Levy et al. (2002). These investigators conducted a longitudinal study stretching across more than twenty years. In this study, based upon assessment of the participant's self-perception of aging, two groups were formed. One group of participants had mainly positive perceptions about their own aging, the other group of participants had negative perceptions about their own aging. After about 10 decades, it was found that the participants with positive beliefs about aging lived on the average 7.5 years longer than those with negative beliefs. The major reason for this difference was that persons with positive self-perceptions of aging perceived their lives as hopeful, fulfilling and meaningful, that is, they had a healthy lifestyles. On the other hand, those with negative self-perceptions tended to perceive their lives as hopeless, full of helplessness, empty and worthless, that is, they had unhealthy lifestyle.

Researches have revealed that in unhealthy lifestyle, many factors have their significant contributions. Among these, unhealthy diet, overeating, lack of exercise, alcohol or drug abuse, little sleep are important ones. But the most dangerous behaviour of all are smoking and drug abuse.

Exercise is considered as the best means of keeping fit and healthy. Several studies have shown that regular aerobic exercise pays rich dividends in the form of improved physical and mental health as well as fitness. *Aerobic exercise* refers to the exercise which uses large muscle groups in continuous, repetitive action and requires increased oxygen intakes, increasing breathing and heart rates. Some of the examples of aerobic exercise are running, swimming, brisk walking, cycling, rowing and jumping rope. To improve cardiovascular fitness and endurance and to lessen the risk of heart attack, aerobic exercise should be performed regularly. Regular aerobic exercise is considered beneficial for people of all age groups. Even pre-schoolers have been shown to derive cardiovascular benefits from planned regular aerobic exercise (Alpert et al., 1990). In case of adults, regular and planned aerobic exercise yields dramatic increases in muscles and bone density. Researchers have established the following benefits of exercise:

1. It moderates the effect of stress.
2. It benefits the immune system by improving the functioning of natural killer cells (Fiatarone et al., 1988).
3. It burns up extra calories, enabling the person to lose weight or maintain the correct weight.
4. It increases the functioning of heart, enabling it to pump more blood with each beat, thus, improves circulation of blood.
5. It makes bone denser and stronger, helping to prevent osteoporosis among women.
6. It raises high density lipoprotein or HDL (good blood cholesterol) level.

workshop, the members feel closer to each other, develop communication skills and have a sense of how to approach organisational problems in collaborative manner. Further workshops are held. Then, the members feel well in working together and enjoy the favourable climate of the organisation. Consequently, the new higher secondary school may experience poor absenteeism of the employees, a low turnover of the staff and is perceived as a model school in the district. Keys and Bartunek (1979) conducted a study in which an attempt was made to demonstrate the impact of organisation development upon school functioning. In this study, training workshops for teachers of seven experimental schools were organised in which the principal and seven teacher from each school participated. The participants were trained in communication, participative problem solving, and conflict management. Subsequently, these participants were requested to provide similar training to the remaining teachers back in schools. In the following year, the teachers in schools met to identify common goals that would form the basis of the educational change. Questionnaires from all teachers and interview from two teachers from each school were used to assess the extent of agreement on goals and use of human relation skills. Similar data were collected from teachers of seven other schools that had not received such training. Results revealed that the teachers from the seven experimental schools showed greater gain in goal agreement than the control schools. Teachers from the experimental schools (the trained group) reported greater participation in discussions and decision-making and resorted to more use of management skills than the teachers from control schools. Not only that, such favourable effects transferred to new teachers, who had joined these experimental groups. On the basis of this study conducted by Keys and Bartunek, it can be safely concluded that organisation training can enhance the effectiveness of member participation in problem solving and decision-making. The intervention in this study was found to be successful even though the entire faculty members of the schools had not received training from external consultants.

Thus, we see that social psychology of education has various facets and each can contribute significantly to the improvement of existing educational systems.

SOCIAL PSYCHOLOGY: PERSONAL HEALTH

Social psychology has much to contribute to our understanding of those factors that affect health and personal well-being. Growing evidences suggest that health is a biopsychosocial process because it is governed by a complex interaction among genetic, psychological and social factors (Taylor, 2002). Biological factors such as genetic predisposition to a particular disease, psychological factors such as the experience of stress and social factors such as the amount of social support one receives from family and friends tend to interact with each other and have an impact upon the health of a person. Various researches have suggested that there is a very strong link between the lifestyles a person adopts and his health and illness. A *healthy lifestyle* is one in which we avoid behaviour potentially harmful to health and seek early detection and effective treatment of illness (Glanz et al., 2002). Since social psychology studies topics which are related to lifestyles of a person such as attitudes and beliefs, different ways of coping with stress and personal characteristics that have an important role to play in the health of the person as well as its principles and theories have been widely applied for understanding health and illness of the people.

ones. Researches done by Bandura (1986) Rogers (1984) and Weinstein (1993) showed that practising health behaviours rested upon five sets of beliefs presented as below:

1. General health values, which include interest in health and concern about health
2. A belief in personal vulnerability to certain disease or disorder
3. Realisation that the threat to health posed by a disorder or disease is severe
4. Belief of self-efficacy relating to performing the necessary response for reducing the threat
5. Belief regarding response efficacy, which means that the response will be effective in overcoming the threat

These health beliefs generally predict health behaviours quite well. Another attitudinal component that predicts health behaviour was added by Fishbein and Ajzen's (1980) *reasoned action model*, which states that behaviour is a direct result of a behavioural intention. Knowing an individual's intention, we are able to predict whether, for example, he or she will use preventing screening programmes, use contraceptives, and do physical exercise among other health behaviours. However, some factors are not fully incorporated into this attitude model. For example, among adolescents, many risky behaviours are not planned; rather they happen as a result of circumstances, which lead them to engage in smoking, drinking, unprotected sexual behaviour and other risky behaviours. Besides, some health behaviours are controlled by positive or negative consequences and those factors are also not explained by attitude models. Moreover, attitude models assume that people use extensive cognitive capabilities for making health behaviour decisions. But sometimes, we make inferences or decision very rapidly using highly salient or heuristic processes. In general, when a health issue is perceived to be very important and relevant, it is likely to be processed systematically through central attitude change routes, but when the issue is perceived to be less relevant for self, people are likely to use heuristically based judgement strategies (Rothman and Schwarz, 1998).

Thus, we see that the attitudes we hold about health, in general, and about our own health, in particular, are important determinants of our health behaviour. Levy et al. (2002) conducted a longitudinal research in which this fact was more vividly established. In this study, the researchers tried to assess individual's self-perceptions of aging—that is, their beliefs that what would happen to them as they would become older. After this assessment, they divided the participants into those who had mainly positive perceptions about their own aging and those who had negative perceptions. These two categories of the participants were followed over more than twenty years. A surprising result was obtained. Those having positive attitude and perceptions were more likely to continue living almost seven-and-a-half years longer than those with negative beliefs and perceptions. According to these researchers, such difference was attributed to the will to live. In other words, people with positive beliefs and self-perception of aging tended to perceive their lives as hopeful, fulfilling and worth-living, while those with negative beliefs and negative self-perceptions of aging tended to perceive their lives as hopeless, worthless and empty. People with positive self-perceptions took better care of themselves to live a healthier lifestyle. Consequently, they lived longer. The study clearly confirmed the link between healthy attitudes and healthy behavioural practices.

Health behaviour is also influenced by health-related cognitions, especially the dimension of their awareness. Parasher (2002) considered awareness studies important because they provide information about current status of knowledge of people as well as information about their lifestyles. Latha and Suresh (2002) reported that knowledge and health behaviours or lifestyles are significantly related to each other in coronary heart disease patients. Likewise, Biswas and D.

Health Behaviour and Health Attitude

What is health? Health is frequently described and explained in various discourses that are socially constructed. The word *health* is derived from Old High German and Anglo-Saxon words, meaning *whole*, *holy* and *hale*. Culturally as well as historically, there are strong associations of health with concepts such as *wholeness*, *hygiene*, *holiness*, *cleanliness*, etc.

As we know, the concept of health and illness are embodied in day-to-day talk and in thought of people of all cultures and religions. One early Greek physician, Galen (BC 200-129) followed the Hippocratic tradition and pointed out that *hygieia* (health) or *euxia* (soundness) occurred when there was proper balance between the hot, cold, dry and wet components of the body. The four bodily humours were blood, phlegm, yellow bile and black bile. Blood was considered as hot and wet, phlegm was considered as cold and wet; yellow bile was considered as hot and dry and black bile was considered as cold and dry. Any disease was thought to occur by external pathogens, which tended to disturb the balance of the body's four elements—hot, dry, cold and wet. Galen believed that body's state could be put out of equilibrium by excessive heat, cold, dryness or wetness. Such disequilibrium or imbalance might be caused by anxiety, distress, fatigue, insomnia, etc.

Today, the meaning of health is different and broad one. (The World Health Organisation (WHO) published a definition in 1946. This definition states that *health* is the state of complete physical, social and spiritual well-being, not simply the absence of illness) According to WHO definition, health is seen as well-being in its broadest sense and well-being is the product of a complex interplay of biological, socio-cultural and spiritual factors. However, (the WHO definition overlooked some key elements of well-being. For example, the economic factors cannot be ignored. Likewise, psychological aspect of well-being cannot be fully ignored in any meaningful definition of health. Therefore, a complete and meaningful definition would be—*Health* is a state of well-being, physical, psychosocial, cultural, economic and spiritual attributes and not simply the absence of illness (Marks et al., 2008).)

In classical Indian traditions, health is understood as a state of delight or a feeling of spiritual, physical and mental well-being (*prasannatnmendriyamanah*), and in fact, this explanation is similar to the WHO definition of health/well-being (Dalal, 2001; Sinha, 1990). Based upon teachings of *Bhagvadgita*, Verma (1998) pointed out that human well-being unfolds at three levels, namely, *cognitive*, *conative* and *affective*. Well-being at the cognitive level demands self-examination leading to freedom from desires and attachment called *anasakti* (Naidu and Pande, 1999). At the conative level, well-being requires the performance of one's duty or *Karma* (Verma, 1994; Ram, 2000). Finally, at the affective level, the well-being lies in the attainment of freedom from pain and mine. In sum, then, the Indian traditional perspective provides an ideal state of human functioning and constitutes health and well-being as a state of mind that is quiet, peaceful and free from conflicts and desires.

Health behaviours are all those behaviours undertaken by people who are healthy to maintain their good health (Taylor, Peplau and Sears, 2006). These behaviours, moreover, include consuming healthy diet, getting regular exercise, getting sufficient sleep, controlling stress, making use of health-screening programmes. Researches have shown that the more health behaviours people practised, the fewer illnesses of all kinds they reported and the more they were said to possess (Belloc and Breslow, 1972).

Since good health behaviours are essential to good health, it is very important to identify and promote health behaviours, which force people to practise good health behaviours or continue to practise

Causes of Stress

There are several factors that contribute to health. Social psychologists have tried to identify factors that add to our total stress quotient. Among the most important of these are major stressful life events, hassles of daily life and various dispositional factors, and social factors, etc. These are described below:

1. Major stressful life events: Social psychologists in their earlier researches have tried to demonstrate the relation of stress to health by recognising the role of major stressful life events in the onset of illness and health. Major stressful life events include death of spouse, jail term, marital separation, divorce, death of members of family, personal injury or illness, and so on. Working earlier in this field, Holmes and Rahe (1967) pointed out that any life event requiring people to change or adopt their lifestyles would result in stress. Like Selye, they basically assumed that both negative events and positive events demand that a person must adjust in some way, and therefore, both kinds of events are associated with stress. Holmes and Rahe (1967) developed a scale, called *social readjustment rating scale (SRRS)*, to measure the amount of stress in person's life in terms of *life change unit (LCU)*, which is the numerical value assigned to each life event. For example, in SRRS, the critical life events such as death of spouse, divorce and death of a closed family member were given LCU of 119, 98 and 92, respectively. After administering the scale, LCUs for all life events experienced by the person are added. If the added value is in between 0-150, no significant problems are said to exist; if the value is in between 150-199, mild life crisis indicating 33% chances of illness is said to exist; if the value lies between 200-299, moderate life crisis indicating 50% chances of illness exists and if the added value is more than 300, major life crisis indicating 80% chances of illness exists. In a study conducted by Kendler and Prescott (1999), it was found that stressful life events of the kind listed in SRRS were excellent predictors of the onset of depression. The SRRS was later revised by Miller and Rahe (1997) to reflect the changes in the ratios of events in the 30 intervening years since its inception in 1967.

Since the SRRS tends to be more appropriate for older and the established adults, it does not suit much for college students, who are affected by stressful events such as entering college, changing majors or the breakup of a steady relationship (Crandall, Preisler and Aussprung, 1992). Therefore, for assessing stress experienced by college students, one of its recent versions named as college undergraduate stress scale (CUSS) has been developed (Renner and Mackin, 1998).

Indian psychologists have also remained very active in associating stressful life events to illness and health. Across different categories of people based on occupation, gender, age and habitat, people who experience stress are found to be more susceptible to unhealthy lifestyles, illness and lower well-being (Dalal, 2001; Naidu, 2001). Subsequent researches have further shown that people who are exposed to life-event stress are at a greater risk of psychological distress (Agrawal and Dalal, 1994; Banerjee and Vyas, 1992; Jagdish and Reddy, 2000; Rastogi and Kashyap, 2001; Sharma et al., 2004). These researchers further showed that the number/frequency of critical life events is not so important. What appears to be significant is the perceived negative impact either directly or through a maladaptive coping (Sharma, 2003; Sharma et al., 2004).

Hassles of daily life: The bulk of stresses that we experience daily actually come from minor irritations, delays, irritations, minor disagreements and similar annoyances, termed as *hassles* (Lazarus, 1988; Lazarus and Folkman, 1984).

(ii) **Job stress:** Stress resulting from the conditions of job in the workplace. Some of the important sources of stress in the workplace include workload, lack of control over decisions, long working hours, poor physical work condition and lack of job security (Murphy, 1993). Researchers have further shown that stress from workplace results in more or less same symptoms as stress from any other sources. Such important symptoms are high blood pressure, indigestion, headache, anxiety, irritability, anger, depression, etc. and some behaviour symptoms such as overeating, poor job performance, drug abuse, changes in family relationship (Anschuetz, 1999). Besides, one serious effect of workplace stress is burnout, which is defined as negative emotions, thoughts and behaviour as a consequence of prolonged stress (Miller and Smith, 1993). The common symptoms of burnout are extreme dissatisfaction, lowered job satisfaction, pessimism and a strong desire to quit.

(iii) **Acculturative stress:** Culture also affects stress. *Acculturation* refers to a process of adapting to a new or different culture often the majority culture. When a person from one culture comes to live in another culture, that person may experience some stress. The stress resulting from the need to change and adapt to the dominant or majority culture is known as *acculturative stress* (Berry and Kim, 1998). According to Berry and Kim (1998), there are four methods that a person chooses to enter into dominant culture and these methods tend to produce differential degree of stress in the person who enter into dominant culture. The four methods are integration, assimilation, separation and marginalisation. In *integration*, a person tries to maintain the identity of his original culture and to form a positive relationship with the members of new and dominant culture. Integration produces a lower degree of acculturation stress (Ward and Rana-Deuba, 1999). In *assimilation*, the person gives up his original cultural identity and completely adopts the ways of new dominant culture. Assimilation produces a moderate level of acculturative stress due to loss of cultural patterns and rejection by the other members of his original culture, who have not preferred assimilation (Lay and Nguyen, 1998). In *separation*, the person rejects the majority cultural pattern and ways and tries to maintain his original culture identity. People opting for such method refuse to learn the language of the majority culture and they live where others from their own original culture live. Separation results in higher degree of stress and if separation is forced, rather than voluntary, the degree of stress would still be higher. In *marginalisation*, the people neither maintain contact with their original culture nor join the dominant culture. They live on the margins of both cultures without becoming part of either culture. Consequently, marginalised people have little in the way of social support to help them deal with various stressful life events. As such, the level of acculturative stress is high among marginalised persons.

(iv) **Family structure:** Several domains of our behaviour are regulated more directly at family level than at individual level. We find a strong tradition of understanding the various psychosomatic illness from the perspective of family. Some studies have highlighted the impact of nuclear and joint families upon health and illness, though the results have not been consistent (Dastidar and Kapoor, 1996; Jagdish and Yadav, 1999). It has been pointed out that the functional content of family relations does have an impact of health and illness. For example, if a conflict frequently occurs between the members of family,

1988). These researchers suggested that daily hassles like too many responsibilities, problems with works, inconsiderate neighbours, trouble making decision, separation from family, misplacing or losing things, etc. are important cause of stress. High positive correlation was found between scores of hassle scales and reports of psychological symptoms. Thus, the more stress people reported due to daily hassles, the poorer was their psychological well-being. Whereas the major life events of Holmes and Rahe's scale (1967) tend to have a long-term effect upon person's chronic physical and mental health, the day-to-day hassles have impact upon immediate health and well-being and are considered as better predictors of short-term illnesses such as headache, cold, and similar other symptoms (DeLongis et al., 1988). In a study conducted by Fernandez and Sheffield (1996), it was found that among 261 participants who experienced headaches, the scores of hassle scale were significantly better predictors of headaches than were the scores on life events scale.

3. Dispositional factors: *Disposition* refers to personal resources that reside within a person. Dispositional factors work directly through their association with health and illness. Many personality traits/types have been found to demonstrate a closer link with greater stress and dysfunctional well-being. For example, Type A personality, who is competitive, ambitious, hates to waste time and is easily annoyed, is associated with enhanced physiological reactivity to stress, which is one of the mechanisms that initiate and hasten the development of coronary heart disease (CHD) (Contrada et al., 1985; Krantz and Manuck, 1984). Researches have linked various other dispositional factors such as locus of control, ego strength, field dependence, optimism, extraversion, future orientation, etc. with various indicators of mental health (Shrivastava, 2004; Mukherjee and Mukhopadhyay, 1999). Indian researchers have further tried to establish relationship between various indigenous dispositional concepts like *tamasic* disposition and *anasakti* (means non-attachment) disposition. Pandey and Nigam (1992) reported that when faced with stressors, those persons who practice *anasakti* were found to be less distressed and exhibited fewer symptoms of ill-health. Likewise, Daftuar and Anjali (1999) found that *tamasic* disposition tended to generate occupational stress, with severe psychological, psychosomatic and behavioural consequences. Some researchers have studied the role of trait (a component of type A personality) and trait anxiety in cardiovascular disease (CVD). According to the research done by Ghosh and Sharma (1998) and Sharma (2003), higher trait anger was found to be associated with hypertension or peptic ulcer. (These patients resorted to greater anger suppression and control of their angry feelings. Such patients also reported higher trait anxiety (Pradha and Shrivastava, 2003)).

4. Socio-cultural factors: The importance of socio-cultural factors in causing stress is emerging as a significant focus of research. Here, important factors that are considered are poverty, job stress, acculturative stress, family structure, residential density and environmental hazards.

- (i) **Poverty:** Poverty is stressful for several reasons. Poor people lack sufficient resources for meeting the basic necessities of life. Such condition can produce too many stressors for both adults as well as children. Researches done by Park et al. (2002), Aligned et al. and Schmitz et al. (2001) revealed that poverty often leads to poor medical care, higher rates of disabilities due to improper prenatal care, noisy and overcrowding environment, violence, substance abuse, etc. All these conditions generate stress and have a negative impact upon personal health of the person.

study in which out-of-school slum adolescents of Anand district of Gujarat participated as subjects. Their findings revealed gender variation in awareness and concerns about reproductive and sexual health. Males were found to be more aware than females. Collumbien and Hawkes (2000) observed that slum, rural and tribal people lacked basic knowledge in the area of fertility, maternal health, sexually transmitted diseases (STDs). Sachdeva (1998) also observed that female university students were not in favour of the repressive traditional Indian sexual standards relating to pre-marital non-procreative sex. Likewise, some Indian researchers have reported a varying degree of awareness about HIV/AIDS (Veeraraghavan and Singh, 1999; Agarwal and Kumar, 1996). Recently, Chaturvedi (2001) reported a very low degree of awareness about HIV/AIDS among both school children and their teachers. About half of such teachers and school boys reported that such patients are kept in isolation for preventing the spread of shameful disease. Bharat (2000) conducted a study in which he examined how HIV/AIDS patients are perceived and interpreted in low-income communities of Mumbai. His observation revealed many misconceptions and fears despite familiarity with this disease. Men were found to convey not only greater awareness but also misconceptions about HIV/AIDS.

Stress, Health and Illness

Stressful life experience and the ways people cope with those stressful events have an impact on health and illness (Taylor, 2002). *Stress* is defined as a negative emotional experience accompanied by predictable physiological, biochemical and behavioural changes, which are designed to adapt to the stressors. Generally, we think stress as originating from particular event such as stuck in traffic, being late for an appointment, getting poor marks in the examination, etc. There are some commonalities in experience of stress, not everyone perceives the same event as stressful. For example, one person may experience job interview as stressful, whereas another may welcome it and consider it as a challenge. It means that to some extent, stress lies in the beholder, and this fact makes stress a psychological process. Therefore, any event is stressful that is regarded as stressful and not otherwise (Lazarus and Folkman, 1984).

Now, the question is—what makes events stressful? Social psychologists have identified characteristics of events that help in being appraised them as stressful. Generally, unpleasant events produce more psychological distress and produce more physical symptoms in comparison to positive stressful events (Sarason, Johnson and Siegel, 1978). Likewise, uncontrollable events cause more stress than controllable or predictable ones (Lazarus, 1988; Suls and Mullen, 1981). This happens because uncontrollable events do not allow a person to develop ways to cope with the problem. For example, excess sound from your neighbour may be less distressing than the similar sound from neighbour because you can turn off the volume of your own TV. Similarly, social psychologists have pointed out that unpredictable events generally cause more stress than what is caused by clear-cut defined events. This is because of the fact that when events are clear, people are more inclined to find solutions and they move ahead at the problem-solving stage (Billings and Moos, 1984). Likewise, events may be perceived as unresolvable. In general, unresolvable events are perceived as more stressful than the resolved.

Problem-focused coping strategies are one, where people try to eliminate the source of stress or reduce its impact through their own actions (Lazarus, 1993). In simple words, problem-focused strategies are the attempts to do something constructive about the stressful conditions that are threatening, modifying or challenging an individual. Therefore, such strategies are direct and consists of reducing, modifying or eliminating the source of stress itself. For example, if a student is getting a poor grade in mathematics and appraises this as a threat, he may decide to study harder, get a tutor or drop the course and select some other subject.

Well-functioning persons generally use a combination of problem-focused and emotion-focused coping strategies in almost every stressful situation. Folkman and Lazarus (1980) conducted a study in which coping patterns of 100 subjects over a 12-month period were studied and they found that both types of coping strategies were used in 98% of 1300 stressful events that they had confronted. It was further revealed that problem-focused coping strategies increased in situations, where subjects were appraised as changeable and emotion-focused coping strategies increased in those situations that were appraised as not changeable and uncontrollable. In using these two types of strategies, gender variations were observed because males used both problem-focused coping strategies and emotion-focused coping strategies, but female counterparts preferred to use emotion-focus coping strategies (Sahu and Misra, 1995; Sharda and Raju, 2001).

Recently, Minhas (2003) studied the coping strategies adopted by Kashmiri migrant children in Jammu due to the militancy of their native land. They were found to resort to strategies, which included daydreaming, withdrawal and compensation. All these children, thus, largely used emotion focused coping strategies rather than problem-focused coping strategies.

Some researchers have revealed that emotion-focused coping strategies may be effective in short run, but they may be ineffective or even dangerous in the long term. For example, researches done by Goeders (2004) revealed that after having the experience of being stressed, some people drink alcohol or take drugs. Although this makes them feel better for some time, it leaves the cause of stress largely unchanged and even may damage their health.

Seeking social support is another popular strategy for reducing the impact of stressors because we know that health and happiness are influenced not only by social cognition but also by social relationship. Social support is conceptualised as support provided usually in time of need, by a spouse or other members of the family, or by friends, neighbours, colleagues, or others. Social support can involve tangible support, information and advice as well as emotional support. Social support either elicited or provided spontaneously plays an important role in dealing with life's challenges and threats (Sharma and Misra, 2010). Social support has been found to encourage health-promoting behaviours and reduce the impact of stress so that people will be less likely to resort to unhealthy ways of coping such as smoking or drinking (Adler and Matthews, 1994). Further, social support has also been found to reduce the impact of stress from unemployment, long-term illness, and bereavement (Krantz et al., 1985). Individuals with proper social support have been found to recover more quickly from illnesses and lower their risk of deaths from specific diseases (Cohen et al., 1988). Social support has been found to help moderate the surviving heart attack and increase the longevity of surviving the cancer patient (Turner, 1983). Berkman and Syme (1979) conducted a study on 44775 individuals over a 9-year period and found that people with low social support were twice as likely to die as those high in social support. Indian researchers were also found that a reliable social support of kin and friends often reduces the risk of diseases and enhances health (Pal et al., 2002; Dalal, 2001; Pradhan and

physical and mental health of the members are adversely affected and their members succumb to various types of illnesses (Evans et al., 1998).

- (v) **Residential density and environmental hazards:** Residential crowding and the resulting environmental pollution also cause stress and affect the health and well-being in the long-term time. Living in such crowded homes is likely to have negative consequences for human physical and psychological health (Arora and Sinha, 1998; Pandey, 2003). In an important study conducted by Evans et al. (1998) on 10 to 12 years old children of Pune city, it was found that chronic residential crowding was associated with elevated blood pressure, learned helplessness, impaired parent-child relationship, and poor adjustment in schools. All these have adverse impact upon physical and mental health of the dwellers.

Nowadays, environmental hazards particularly biological pathogens, physical hazards, chemical pollutants and shortage of specific natural resources are posing serious problems for the personal health. Researches have revealed that the incidence of water-borne diseases, tuberculosis, respiratory infections, etc. have provided ample evidence for the concerned fact (Singh and Misra, 2004).

How Does Stress Affect Health and Well-Being?

Stress plays a very important role in personal health. It affects both our physical and mental health. But how do exactly such effects occur? Growing research evidences suggest that stress affects our health by draining our resources, producing negative affect, disturbing our physiological balance and ultimately disturbing our internal chemistry. In fact, it disturbs our internal chemistry by interfering with efficient operation of our immune system, which helps in recognising and destroying potentially harmful substances such as bacteria, viruses and cancerous cells. The main cells of immune system are leucocytes, usually known as *white blood cells*. Three important types of leucocytes are granulocytes, leucocytes that engulf and destroy bacteria and antigen-antibody complexes, monocytes which generally recognise carbohydrates on surfaces of microorganisms and lymphocytes that are subdivided into B cells, NK or natural killer cells and T cells and tend to attack specific targets such as virus infected and tumour cells. B cells produce antibodies that control infection. A fairly consistent finding has been that chronic stress is associated with down regulation of immune systems with changes found particularly in the number of NK cells, the total number of T cells and the proportion of T helper cells to T suppressor cells (Marks et al., 2008). Some studies have shown that anticipated stressors, that is, those that have not yet occurred but which were expected, are found to be related to the decreased percentage of T helper cells, which enhance immune responses. Another variable T cell is T suppressor cells that inhibit immune responses.

Baum (1994) gave some suggestions for a model that tends to explain how stress can affect our health and well-being. This model states that stress produces both direct and indirect effects upon us (see Figure 17.1). Direct effect includes higher blood pressure, increased amount of damage to the body cells, etc.

Indirect effect involves influences on our health-related behaviour such as delay in seeking medical assistance, less effort to engage in preventive behaviour and so on as well as influence upon our fitness-related behaviour such as choosing less nutritional food, sleeping less, increased smoking and consumption of alcohol.