takes place during infancy and childhood, largely within the family setting. The secondary socialization involves learning that takes place outside the family. The family relations are central to primary socialization. Various personal and social attributes including personality and self evolve and take special shape during socialization. The process of socialization takes place with the help of several agents. The main agents of socialization are described below.

Family Family happens to be the first major source of socialization. The parents, siblings, grandparents, and other relatives influence the social development of a newborn and help internalizing the culture and forming an identity. The care and support of parents is not only a key to physical survival and security but also helps acquiring social skills and social knowledge, and a sense of selfhood. In particular secure attachment of a child to its caregiver is very critical. Families deliberately and by design create occasions for certain kinds of interaction patterns but some of them are inadvertent. The family also provides an ascribed status to its young members. The key events in life such as education, marriage, and choice of profession are often related to the social stratum in which children are born. For instance social mobility and opportunity in the Indian society are often determined by the social class and caste of the family.

The parents and siblings of a child play a key role in sex role socialization. The same sex parents often become role models for children's gender identity. Young children spend a lot of time in close contact with mothers. However, the process of socialization is a two way process. In reality both, child and parents socialize each other. For instance, the cry and smile by the child both influence the behavior of other members of family and their reactions to the child influence the pattern of child's behavior. In this we may note that the tradition family structure is changing. The employment of both the parents outside the household and increase in the number of single parent families is changing family relations.

Parenting or parental practices vary along two dimensions, i.e., emotional responsiveness and controlldemand. The emotional orientation toward children can range from warm and responsive to cold and rejecting and control orientation can range from authoritarian power assertion to indifference and neglect. This has led to three different parenting styles, i.e., authoritarian (low warmth-high control), authoritative (high warmth-high control but foster independent responsibility) and permissive (unstable on warmth-low on control). It has been found that the children of authoritative parents show high self esteem, high academic performance, and positive adjustment to traumatic conditions. The authoritarian parents' children have low self esteem, poor peer relationship, and aggression. The children of permissive parents are found to have difficulty in school adjustment, aggressive, and indulge in problematic behaviors.

School Schools are institutions for formal teaching which is important for transmitting knowledge to new generations. In this way the cognitive aspects of culture are transmitted and steps are taken for prepara-

tion for the future. Schools offer education in formalized and structured manner. They promote learning of language and mathematical skills, scientific knowledge, art, music, literature, and history. The normative aspects of culture, values and beliefs are also inculcated in the process of child's interaction with peers, and teachers in the school setting. Schools also offer opportunities to children for learning problem solving skills, strategies of cooperation, conflict resolution, and friendship.

Peers Children's peer group consists of children of roughly the same age who live in the same locality or attend the same school. In village the peer

School: Institutions for formal teaching in order to transmit knowledge.

Peers: Groups of the same age who live in the same locality.

group remains stable but in urban settings the peer group changes. In general peers have strong influence on the personality and behavior of children. Such influences become more pronounced during adolescence. Being equal in status and without any official authority peers are based on voluntary association and possess a strong element of social control. They emphasize on independence from parents and conformity with group. They provide opportunity for experiencing social cooperation and group loyalty. The peers often develop a subculture to which adults may come in conflict with. Peer pressure can make growing up a difficult and challenging

task for a young person.

Mass Media In today's world newspapers, magazines, radio, TV, and movies are important in creation and transmission of culture. In particular people spend considerable time watching TV. Media help in defining and shaping identities. They portray various values and preferences and shape the desires and aspirations held by the people. Being a powerful source of modeling the media such as TV exert strong impact and shape the consciousness of the people. It is often held the TV viewers are becoming mass consum-

Mass Media: Helps in transmission of culture through radios, magazines, TV and movies.

ers. Also, the violence shown on TV has been reported to have potential to encourage violence and aggression among the viewers. In particular the young children are more vulnerable and may identify with actors playing violent roles. The exposure time, timing, and exposure to dominant norms and values play critical role in determining the impact of TV watching. The TV programs tend to establish the norms and values and reflect them. The popular movie stars often serve as role models. The techno media is becoming more critical. Computers, the internet, cell phones, and interactive TV are changing the quality of social relations. Computer is becoming a part of personal identity. The meaning of reality has changed with the virtual becoming 'reality'. In the world of cyberspace people create new identities. There is a need to use this agent of socialization in a better way in order to prevent children from developing undesirable behaviors (see Saraswathi, 1999; A. Singh, 2011).

Acculturation

Acculturation is a process that individuals and groups undergo in response to a changing cultural context. It is a form of cultural change in response to contact with other cultures. It often leads to changes in the behavior of the people from the original culture. It takes place at individual as well as group level. The acculturation at individual level is termed as psychological acculturation which focuses on changes in identity, values, and attitudes. Group level acculturation takes place when changes occur in social structure, economic base and political organization. Acculturation encompasses a variety of changes. For instance immigrants often experience differences in climate, language, work habits, religion, culinary preferences and dress. They respond to cultural differences in many ways. The changes may be accepted, reinterpreted or denied. A major context of acculturation takes place when societies undergo colonization when people have no choice. For instance the experience of British colonization in India has led to significant changes in dress, language, beliefs, values, and pattern of education. In the process of acculturation the dominant culture plays a decisive role and the acculturating group may have different degrees of motivation to acculturate.

Intercultural contact and individual psychological response to it are linked to each other. It must be noted that acculturation involves continuous and first hand contact or interaction between two cultures. While acculturation can influence both, the dominant and acculturating groups, one group tends to dominate the other. It general the acculturating group is influenced more than the dominant group. The individuals in acculturating groups undergo psychological changes. The outcome of acculturation depends on the cultural and psychological characteristics of the two groups such as length and purpose of acculturation and the policies adopted. The cultural features of the acculturating group also undergo change. However, the changes among the member of acculturating group are not similar and some domains of culture may be more susceptible to change that others.

It may be noted that individuals and groups enter into acculturative process with different kinds of attitude. Thus people with positive own group and negative out-group attitude would show resistance and rejection of

acculturative influences. An opposite situation would lead to acceptance of acculturative influences. The desire to maintain one's own culture and engaging in interactions with members of other cultural groups is the main key to acculturation outcomes. Researchers have noted large variations in how acculturating individuals or groups desire to relate to the dominant society. These variations have been termed "acculturation strategies" (Berry, 1997; Mishra, Sinha, & Berry, 1996). The choice of these strategies depends on a variety of antecedent factors (both cultural and psychological) and there are variable consequences (again both cultural and psychological). The key acculturative strategies are as follows.

- · Assimilation: If an acculturating individual does not desire to maintain culture and identity and seeks daily interaction with the dominant society then the tendency is to assimilate.
- · Separation: If there is emphasis on maintaining one's original culture and people tend to avoid the interaction with the other then there is preference for separation.
- · Integration: If the acculturating group is interested in dual goal and wants to maintain one's original culture and there likes for interaction with the other than integration takes place.
- · Marginalization: If there is low interest or possibility either in maintaining one's own culture or relating with other then marginalization takes place.

Acculturation leads to two main types of changes, i.e., Behavioral changes which are conflict free (e.g., increase in wages) and acculturative stress (e.g., spouse absence, decline in mental health status, homicide, aggression). These outcomes may be analyzed in the context of the four strategies listed above. In the case of assimilation behavioral change is found to be highest. In contrast, separation results in return to more traditional behaviors. The strategy of integration leads to balance. In the case of marginalization the individual is suspended between the two cultures. The outcomes also depend on the nature of larger society. The multicultural society shows greater tolerance and acceptance of cultural diversity and promotes assimilation. As a result acculturative stress will be low in plural societies. Also, the age, status, availability of social support, nature of stress appraisal and use of coping strategies also influence the acculturative outcomes.

Cultural Contact in the Contemporary Period

In today's world cultural contact is increasing. We are witnessing increase in the number of refugees, immigrants, temporary migrants, and guest workers in different parts of the world. The increase in global trade, telecommunication, and tourism are exposing people to a range of values, beliefs, and life styles. It is leading to a situation that some scholars term cultural borrowing. The global emigration and presence of media are leading to many similarities in values, beliefs, food, and clothing. In large cities culture is becoming hybrid and creates a complex mosaic. The trans/multi national corporations are changing the scenario and people from very diverse cultures are sharing values, beliefs, and norms. Whether this situation will lead to cultural extinction and loss of cultural diversity is an open question which is assuming great significance.

The possibility of emergence of a globalized homogenous culture leading to a new global consciousness and "world culture" has been raised. Of special relevance is the rapid expansion of consumer culture and related idea of individualism in the developing countries like India. It is not clear if it will result in the crisis of rising expectations or rejection of Western culture and rediscovery of traditional values and beliefs. The technological changes have intensified the capitalist tendencies. We are currently in a state of limbo where clash of tradition and modernity is taking place in everyday life. This is being observed in many spheres such as gender equality/freedom versus moral policing of women, religious/spiritual liberty/choice/free will versus conformity/ orthodoxy/obedience. This is not to say that tradition and modernity are exclusive or contradictory, they can co-exist, yet the trends show that certain cultures put an emphasis on a fundamentalist position. This push and

pull of culture is of great significance, for it has adaptive value. What aspects will decay and perish or change and progress is what culture is all about.

Social life involves interactions through which people take account of each other's behavior in determining their own behavior. The biological predispositions may create behavioral tendencies, but human beings engage in conscious reflection on the significance of these dispositions for their own actions. Biology and culture work together to allow behavior to unfold partly in some similar and partly in different ways within and across societies. Modern societies are becoming more and more reflexive. They tend to rely on rational reflection. With gradual disappearance of traditions and customs they engage in monitoring, assessing, and modifying actions in the light of consequences.

Summary and Review

Neurons: Building Blocks of the Nervous System

- What do neurons do, and what are their basic parts? Neurons are cells specialized for receiving, processing, and moving information. They are made up of a cell body, an axon, and one or more dendrites.
- What are action potentials and graded potentials? How do neurons communicate with one another? Action potentials are rapid changes in the electrical properties of the cell membranes of neurons. They constitute a mechanism by which information travels through the nervous system. Graded potentials occur within a neuron in response to a physical stimulus or stimulation by another neuron; they weaken quickly, and their strength is directly proportional to the intensity of the physical stimulus that produced them. Neurons communicate that by means of neurotransmitters across the tiny gaps (synapses) that separate them.
- What are the effects of neurotransmitters?

 Neurotransmitters produce one of two effects: Excitatory effects make it more likely that a nerve cell will fire; inhibitory effects make it less likely that the cell will fire.
- How do drugs produce their effects? What are agonists? Antagonists? Many drugs produce their effects by influencing synaptic transmission. Agonists are drugs that mimic the impact of neurotransmitters at specific receptors; drugs that inhibit their impact are termed antagonists.

The Nervous System: Its Basic Structure and Functions

- What structures make up the central nervous system? What is the function of the spinal cord? The central nervous system (CNS) includes the brain and the spinal cord. The spinal cord carries sensory information from receptors of the body to the brain via afferent nerve fibers and carries information from the brain to muscles and gland via efferent nerve fibers. It also plays an important role in reflexes.
- What two systems make up the peripheral nervous system? What are the roles of these two systems. The peripheral nervous system consists of the somatic and autonomic nervous system. The somatic nervous system connects the brain and spinal cord to voluntary muscles throughout the body; the autonomic nervous system connects the central nervous system to internal organs and glands and to muscles over which we have little voluntary control.
- What are the functions of the sympathetic and parasympathetic nervous systems? The sympathetic nervous system prepares the body for using energy whereas the parasympathetic nervous system activates processes that conserve the body's energy.
- what is the endocrine system? The endocrine system is an internal communication system consisting of glands that release hormones into the bloodstream.
- What are some of its major parts? The endocrin system includes the pituitary and adrenal glands, plu several others.

The Brain: Where Consciousness ... Is

- What structures make up the brain stem? What are their functions? The brain stem includes the medulla, pons, and cerebellum and is concerned primarily with the regulation of basic bodily functions. The cerebellum, however, may also be involved in higher cognitive processes, such as learning.
- What are the functions of the hypothalamus and thalamus? The hypothalamus is a brain structure involved in the regulation of motivated behavior and emotion. The thalamus serves as a relay station, directing afferent messages to appropriate brain regions.
- What evidence suggests the brain dysfuntions may play a role in violence? Recent studies indicate that some murderers may show reduced activity in portions of the brain that act as a brake on the limbic system and that play a role in fear conditioning.
- What is the role of the cerebral cortex? The cerebral cortex is the hub for higher mental processes such as thinking, planning, reasoning, and memory.
- Who are "split-brain" persons? What evidence do they provide for specialization of functions in the two cerebral hemispheres? Split-brain persons are individuals whose cerebral hemispheres have been isolated from each other through surgery. Evidence these persons provide suggests that the left hemisphere is specialized for verbal tasks, whereas the right hemisphere is specialized for perceptual tasks and the expression and recognition of emotions.
- What evidence from persons with intact brains supports such specialization? PET scans of normal persons reveal that when they speak or work with numbers, activity in the left hemisphere increases. When they work on perceptual tasks, activity increases in the right hemisphere.
- What methods are used by psychologists to study the brain and its role in behavior? These methods involve examining the effects of damage to various portions of the brain or nervous system, recording and stimulating neural activity, and obtaining images of the intact living brain.

The Brain and Human Behavior: Where Biology and Consciousness Meet

- What is the modern view of how the brain functions? The brain processes information in parallel, in many modules.
- What evidence suggests that processing of visual information occurs in a parallel fashion? Evidence indicates that visual information about object identification is processed separately than information about where an object is or how we can react to it.
- What is the modern view of speech production and speech comprehension? Speech production involves the flow of information from sensory association areas to the posterior language area and then to Broca's area. Comprehension of speech involves a flow of information from Wernicke's area to the posterior language area and then to sensory association areas and back again.
- What portions of the brain are involved in relational reasoning? Such reasoning seems to occur primarily in the prefrontal cortex.
- What evidence suggests that the words and music in songs are processed by different modules within the brain? Words that are sung off key and words that have incongruous meanings produce two distinctly different event-related potentials (ERPs) simultaneously.

Heredity and Behavior: Genetics and Evolutionary Psychology

- How do psychologists seek to separate the role of genetic and environmental factors in many forms of behavior? They do this primarily through twin studies and adoption studies.
- What is heritability? Heritability is defined as the extent to which variations among individuals with respect to a given aspect of behavior or a given trait are due to genetic factors.
- Why is the DNA of everyone living in Iceland being measured? The Decode scientists are attempting to

relate genetic anomalies to medical records, in order to identify genetic causes of major illnesses.

How dies evolutionary psychology explain the greater dominance motivation in males than in

females? Dominance provides males with access to more females, and so increases the number of offspring they father. For females, access to more males dies not necessarily lead to more offspring, so there is less reason for females to seek dominance.

Critical Thinking Questions

Appraisal

A primary theme of this chapter is that our thoughts, feelings, and actions stem from basic biological processes. Do you think that all of our conscious experience can be reduced to events within our nervous system, especially our brains? If so, why? If not, what is the basis for our thoughts and feelings?

Controversy

If scientists succeed in decoding human DNA (and it seems likely that they will), this may open the door to genetic tinkering with our species—efforts to improve human health or performance through artificial alteration of the DNA of unborn fetuses, or even of human egg cells. Do you

think such efforts should be encouraged? Totally banned? Carefully regulated? Why do you hold this view?

Making Psychology Part of Your Life

Legal systems throughout the world are based on the premise that unless individuals are suffering from serious mental illness, they know what they are doing and should be held responsible for their actions. But now, research findings suggest that some people may behave aggressive because of malfunctions in portions of their brains—an absence of appropriate "neural brakes." Suppose you were asked, as a juror, to judge the guilt or innocence of a person who was charged with committing a violent crime. Would this knowledge about the role of the brain in violence influence your decision? Should it have such influence?