

Chapter 5 Summary

- Most definitions of intelligence include phrases such as knowing and understanding the reality around us. Intelligence is also defined as a set of mental skills that helps individuals reach a goal. Intelligence is also seen as the ability to use knowledge and skills to overcome obstacles. And finally, intelligence is defined as helping one to adapt to a changing environment.

- Intelligence is inseparable from cognition, diversified processes by which the individual acquires and applies knowledge. It usually includes processes such as recognition, categorization, thinking, and memory. Altogether, cognitive development is neither totally culturally relative nor completely uniform everywhere.

- In psychology, most attention has been given to the so-called psychometric approach to intelligence. This view is based on the assumption that our intelligence can “receive” a numerical value.

- Today various tests show differences in intelligence scores among large cultural groups. For example, in the United States, Asian Americans (of East Asian origins) score the highest, followed by European Americans, Hispanics, and lastly African Americans. Thus, on the average, African American schoolchildren score 10–15 percent lower on a standardized intelligence test than white schoolchildren.

- In an attempt to explain some group differences on intelligence test scores, Sternberg suggested distinguishing between intelligence and intelligent behavior. Intelligence, from his standpoint, is a mental process that may or may not result in particular behavioral patterns. These patterns of intelligent behavior may vary from culture to culture. Something considered to be intelligent among members of one culture may not be viewed as such in other cultures.

- According to the nativist approach to intelligence, human cognitive phenomena are inborn. They unravel as a result of biological “programming,” and environmental perception requires little active construction by the organism. There is evidence that heredity plays an important role in human intelligence. However, genetic links for individual differences and similarities

do not imply that group differences—on the national level, for example—are also based on genetic factors.

- Some specialists imply that most intelligence tests benefit specific ethnic groups because of the test vocabulary—words and items used in the test questions. Tests may contain internal bias because they use words that are familiar to only some groups. As a result, members of these groups receive higher scores than those who do not belong to these groups.

- Many environmental conditions have been found to influence performance on intelligence tests. Among them are availability of and access to resources, variety of perceptual experiences, predominant type of family climate, educational opportunities, access to books and travel, presence or absence of cultural magical beliefs, general attitudes, and cultural practices.

- Intelligence scores are, in general, positively correlated with the socioeconomic status of the individual and the link between socioeconomic conditions and test performance shows at an early age. A child’s IQ and the socioeconomic status of the child’s parents are also positively correlated. An affluent and educated family is likely to provide a better material environment for a child and also has more resources to develop the child’s intellectual potential than a poorer family. Poverty is responsible for a variety of indirect impacts on the intellectual development of children and adults.

- In the United States people with high IQ scores are disproportionately represented among doctors, scientists, lawyers, and business executives. Individuals with low intelligence scores are disproportionately represented among people on welfare, prison inmates, single mothers, drug abusers, and high school dropouts.

- There is a difference in the way people across cultures value and construe intelligence. For instance, the conceptualization of intelligence as quick and analytic is not shared in all cultures. If one group’s concept includes being detailed and precise in responding, but the other group does not mention these features (and mentions improvisation as an element of intelligence) then precision cannot be used as a criterion according to which the two groups are compared.

- According to a theory, there are differences in cognitive styles revealed by Western and East Asian students: students from China, Korea, and Japan tend to be more holistic in their perceptions than do students of Western descent.
- Cognitive processes have cross-cultural similarity but may also develop in different ways according to specific cultural norms and societal demands. People develop cognitive characteristics best adapted to the needs of their lifestyle. Cross-cultural findings suggest that differences in categorization, memorization, labeling, creativity, and formal reasoning may be rooted in cultural factors. Various cultural groups categorize stimuli differently in terms of their specific cultural experiences associated with these objects. Many cognitive processes can develop either in similar or in different ways according to specific cultural norms and societal demands.
- U.S. children, generally, are allowed more freedom in choosing school activities than their overseas counterparts. The emphasis is typically placed on individual development, enjoyable activities, and respect for the child's personality. In Asian countries, on the contrary, the active promotion of the mathematical development of children is crucial. From the beginning the child learns rules of discipline, perseverance, and sacrifice for the sake of educational goals.
- Some ethnic minorities may display the so-called low-effort syndrome, or low level of motivation on intelligence tests. This typically suggests that such individuals do not try to excel on these tests because they believe that they will not go to college anyway, the tests are biased against them, and test results are unimportant.
- Overall, in developed Western societies, high IQ scores are correlated with social success. The situation with IQ testing and scores may be changing, however. There is an interesting tendency of a continuous and steady worldwide rise in intelligence test performance. Detected primarily in developed countries, this effect stands for a three-point increase in IQ scores every 10 years and may be attributed to educational efforts and technological developments.

Key Terms

Cognition A general term that stands for a series of processes by which the individual acquires and applies knowledge.

Cognitive Style An individual way in which individuals organize and comprehend the world.

Creativity Originality or the ability to produce valued outcomes in a novel way.

Empirical Reasoning Experience and cognitive operations drawn from everyday activities.

Field-Dependent Style A general cognitive ability of an individual to rely more on external visual cues and to be primarily socially oriented.

Field-Independent Style A general cognitive ability of an individual to rely primarily on bodily cues within themselves and to be less oriented toward social engagement with others.

Formal Reasoning Basic cognitive operations based on abstract analysis of given premises and deriving a conclusion from them.

Intelligence Global capacity to think rationally, act purposefully, overcome obstacles, and adapt to a changing environment.

Low-Effort Syndrome Low level of motivation on intelligence tests based on the belief that the tests are biased and test results are unimportant for success in life.

Nativist View The view that all cognitive phenomena are inborn, that they unravel as a result of biological "programming," and that environmental perception requires little active construction by the organism.

Psychometric Approach to Intelligence A view based on an assumption that our intelligence can "receive" a numerical value.