Growth patterns of children are generally controlled by genetic make-up at birth, although the nurture has also important impact on growth pattern at the time of any growth phase of life. The period of growth process during 8 - 12 years of life is typically slow but steady increase in height and weight changes along with body shape are a few growth phenomena during these years. Differences between the growth patterns of boys and girls are increased at the time of late childhood. Both boys and girls have greater limb growth than trunk growth, but boys tend into have longer legs, arms, stature and girls tend to have greater hip width and thigh size at the time of this period. Growth is not an independent process. And, therefore, factors such as nutrition, exercise, illness and life-style play a significant role in the process of physical growth as well as growth pattern.

Motor development referred as progressive change in movement behavior throughout the life. In motor development domain, the most significant parameter is termed as “motor fitness”. It is understood as a readiness or preparedness of the physique for better performance with special regard to big muscle activities without undue fatigue. It is measured by performance and these performances are based on the factors as speed, agility, power, coordination, balance and reaction time. Motor fitness, although universal, is probably influenced by age, gender and locality.

Individual differences exist in motor development. Hence, in motor fitness, individual to individual, gender to gender and also locality to locality variations exist. Although various factors such as nutrition, exercise may influence the motor fitness as well as motor development. The other important role in motor development involve, where some genetic components that determine the physical size of body parts at a given age, as well as aspects of muscle and bone strength. In motor skills, the main area of the brain involved is the frontal cortex, parietal cortex and basal ganglia.
In cognitive development, the capacity to perceive and to solve a situation exist at a simple level in young infants. They can perform cognitive tasks such as discriminating animate and inanimate beings or recognizing small number of objects. In childhood stage, learning and information processing increase in speed, symbol use, and the capacity to develop until a near-adult level is reached by. The cognitive development has genetic and other biological mechanisms. The nurture factors influence the early brain development of children. Food and nutrition, responsiveness of parents, physical activity, love etc. act as influencing factors. Cognitive development observed to differ at variations like individual to individual, gender to gender, and also with locality. Most of the cases of cognitive development, individual differences, gender differences, and also locality differences exist. Several factors can lead to significant cognitive impairment, particularly if they occur during pregnancy and childhood when the brain is growing and the blood brain barrier is less effective.

The written report about the study has been presented in this thesis in chapter-wise arrangement as per the approved format. If the related literature review and the references provide thought for the future investigators, and the intellectual analysis of data collection with critical conclusion and recommendation within the investigators limited ability satisfy the different readers, the investigator would feel amply rewarded.

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