

Sequence and rate of development from birth – 19 years essay sample

[Health & Medicine](#), [Disability](#)



Child development refers to the biological, psychological and emotional changes that occur in humans between birth and the end of adolescence. It is a continuous process with a predictable sequence yet having a unique course for every child. It does not progress at the same rate and each stage is affected by the preceding types of development. Because these developmental changes may be strongly influenced by genetic factors and events during prenatal life, genetics and prenatal development are usually included as part of the study of child development. The speed of physical growth is rapid in the months after birth, then slows, so birth weight is doubled in the first four months, tripled by age 12 months, but not quadrupled until 24 months.

Growth then proceeds at a slow rate until shortly before puberty (between about 9 and 15 years of age), when a period of rapid growth occurs. Growth is not uniform in rate and timing across all body parts. At birth, head size is already relatively near to that of an adult, but the lower parts of the body are much smaller than adult size. In the course of development, then, the head grows relatively little, and torso and limbs undergo a great deal of growth. The speed of motor development is rapid in early life, as many of the reflexes of the new-born alter or disappear within the first year, and slows later. Like physical growth, motor development shows predictable patterns of -head to foot, - (cephalocaudal) and torso to extremities - (proximodistal) development, with movements at the head and in the more central areas coming under control before those of the lower part of the body or the hands and feet.

Types of movement develop in stage-like sequences, for example, locomotion at 6–8 months involves creeping on all fours, then proceeds to pulling to stand, “cruising” while holding on to an object, walking while holding an adult’s hand, and finally walking independently. Older children continue the sequence by walking sideways or backward, galloping, hopping, skipping with one foot and walking with the other, and finally skipping. By middle childhood and adolescence, new motor skills are acquired by instruction or observation rather than in a predictable sequence. There are Executive Functions of the brain (working memory, timing measure of inhibition and switching) which are important to motor skills. critiques the order of Executive Functioning leads to Motor Skills, suggesting Motor Skills can support Executive Functioning in the brain.

Cognitive Development is primarily concerned with ways in which infants and children acquire, develop, and use internal mental capabilities such as problem solving, memory and language, What develops? The capacity to learn, remember, and symbolise information, and to solve problems exists at a simple level in young infants, who can perform cognitive tasks such as discriminating animate and inanimate beings or recognizing small numbers of objects. During childhood, learning and information-processing increase in speed, memory becomes increasingly longer, and symbol use and the capacity for abstraction develop until a near-adult level is reached by adolescence. Cognitive development has genetic and other biological mechanisms, as is seen in the many genetic causes of intellectual disability.

Environmental factors including food and nutrition, responsiveness of parents, daily experiences, physical activity and love can influence early brain development of children. Developmental advances in cognition are also related to experience and learning, and this is particularly the case for higher-level abilities like abstraction, which depend to a considerable extent on formal education. There are few differences in cognitive development. Boys and girls show some differences in their skills and preferences, but there is a great deal of overlap between the groups. Differences in cognitive achievement of different ethnic groups appear to result from cultural or other environmental factors. Social and emotional development is a big part in a child's life, New-born infants do not seem to experience fear or have preferences for contact with any specific people. In the first few months they only experience happiness, sadness, and anger. A baby's first smile usually occurs between 6 and 10 weeks.

It is called a 'social smile' because it usually occurs during social interactions. By about 8-12 months, they go through a fairly rapid change and become fearful of perceived threats; they also begin to prefer familiar people and show anxiety and distress when separated from them or approached by strangers. The capacity for empathy and the understanding of social rules begin in the preschool period and continue to develop into adulthood. Middle childhood is characterized by friendships with age-mates, and adolescence by emotions connected with sexuality and the beginnings of romantic love. Anger seems most intense during the toddler and early preschool period for example a child may have a temper tantrum and start

to thrash their arms around kick and scream, but this is a way of expressing that they are unaware of what is going on and may feel threatened by something/someone so they express this feeling by using what some people may deem unacceptable behaviour.

Explain the difference between sequence of development and rate of development and why the difference is important. Sequence of development is a process where an event is followed one after the other and achieves a level of succession with a series of changes or growth that a process undertakes normally to improve on that process leading to a matured state. In "normal cases" the sequence of development depends on previous events which have happened, for example a baby first starts to roll, thereafter 6-7 months they try to sit, soon after they start crawling using their legs and hands. Next stage at the age of 1yr they will try to stand holding things, try to walk holding parents hands and finally they reach a stage of succession where they can walk independently. Rate of Development is a quantity of something in comparison with a unit of another thing. Rate of development varies child to child. Each and every child has a different rate of development.

Although they follow more or less the same pattern, for example, some babies start teething from 6 months and some of them start even at 9 months, some babies can start making sentences at around 1 Yr but in some case at the age of 1 yr they only can speak few broken words. Sequence of development means you must finish one sequence before you start the other the typical saying you can't run before you can walk, and the development is

the pace that the child develops, within each sequence or altogether. Explain how children and young people's development is influenced by a range of personal factors. The causes of " learning disability" or " special needs" are not well understood and often unknown. It is thought that the more " common" causes of a learning disability may be either, •Heredity - Learning disabilities often run in the family. Children with learning disabilities are likely to have parents or other relatives with similar difficulties.

- Problems during pregnancy and birth - Learning disabilities can result from anomalies in the developing brain, illness or injury, foetal exposure to alcohol or drugs, low birth weight, oxygen deprivation, or by premature or prolonged labour.

- Accidents after birth - Learning disabilities can also be caused by head injuries, malnutrition, or by toxic exposure (such as heavy metals or pesticides), and sometimes child vaccines.

Many of the students at sunfield have been diagnosed as having one of the three recognised disorders in the Autistic Spectrum - ASDs. There are three main types in the ASD, one is Autism, this affects information processing in the brain by altering how nerve cells and their synapses connect and organize. The second is Asperger syndrome, which lacks delays in cognitive development and language. The third is pervasive developmental disorder, not otherwise specified commonly abbreviated as PDD-NOS, this is diagnosed when the full set of criteria for Autism and Asperger syndrome are

not met. The diagnostic criteria requires the symptoms become apparent before they are three years old.

Development and understanding processes are slowed down when a child has a disability as their brain receives messages at a considerably slower rate of that of a “ normal” developing child. Some children may also have a physical disability such as visual impairments, hearing impairment, and more common than not a mobility impairment such as cerebral palsy which is when motor control sensors to the brain are damaged therefore causing either paralysis to the limbs or movements such as heavy jerking, shaking, or trembling limiting the movement of muscles/limbs.

This can have an effect on the child as they may feel socially unaccepted, not feel that they can express themselves as they would wish to, their understanding and communication may be limited and they may find it hard to express feelings, wants, needs and may show in other behaviours such as “ challenging behaviour” “ bipolar disorder” “ depression” they may become withdrawn from their settings or they may be very high and want attention from everybody and feel elated, this shows in many different ways socially as in the world today this sort of behaviour is not accepted in society and people have become very ignorant to this.