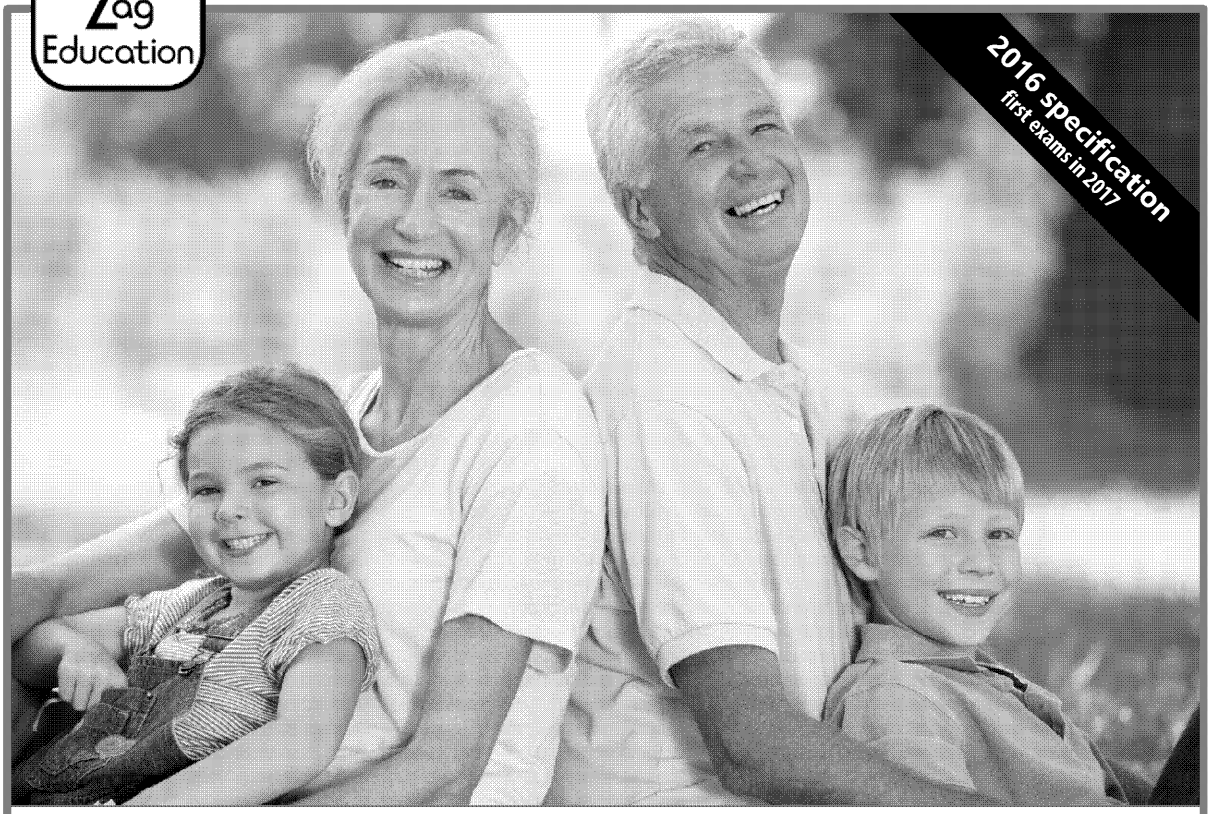
Zig Zag Education

Health and Social Care Pearson BTEC National L3



Course Companion for BTEC Level 3 Health and Social Care

Unit 1: Human Lifespan Development

endorsed for BTEC

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Contents

Teacher's Introduction

This course companion is designed to support the BTEC Level 3 Health and Social Care Unit 1: Human Lifespan Development. Within the companion the Unit has been divided into three main sections:

- Human Growth and Development through Life Stages;
- Factors Affecting Human Growth and Development; and
- Effects of Ageing

Each section has been subdivided according to the order of the course specification. Each subsection provides detailed information on the subject covered and may be used by your students both in class and as a reference tool. Throughout the text, key terms, definitions, vocabulary and explanations have been placed in boxes in order to highlight their relevance to the more detailed information provided on that page. These 'sound bites' provide students with an opportunity to quickly build upon their understanding and knowledge of each topic, using the text as a support and source of more information.

Revision questions are provided at the end of each subsection, providing students with the opportunity to check their understanding of the topics covered. Short answers are provided at the back of the book, so students can check their own work.

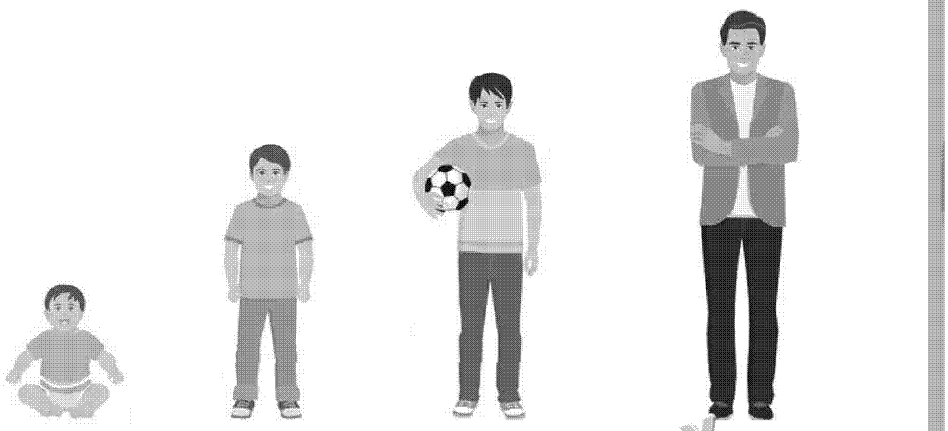
A glossary of key or unusual terms and a reference list are also provided.

September 2017

A1: Physical developme

Growth and development are lifelong holistic pro ess s which are neither precise on innate biological mechanisms and ge et reality, as well as on the age and li They are also influenced by ext r al f ors such as the environment (e.g. access t sociocultural factors (e. w nder affects life opportunities and expectations).

A life stage ed by age in years, and for the purposes of this BTEC the age ba



Infancy	Early childhood	Adol ce	Early adulthood	
0–2 years	3–8 years	9 years	19–45 years	

What is the difference between growth and dev

Growth is different from development, although both are codependent and relian

As we grow, the body undergoes physical and physiological changes. Physical changes refer to size and proportion; for example, increases in height and weight, changes in the size of body organs, muscle development, even the length of your hair and fingernails. Physiological changes refer to the functions of the body. An example of a biological physiological change is menopause. An example of an adaptive physiological change is how a gymnast or ballet dancer enhances flexibility and stamina through training.

Grow
mass

Devel
acqui

Physical growth measured as height stops once w re s maturity, which is aroun for boys. However, changes in muscle ass ight and body shape continue thr growth may also continue dep ding lifestyle choices or training; however, as easy to maintain fitness l s. ther biological factors that affect both physical a changes in ne yels (puberty and menopause), and a decrease in the abilit absorb certa rients, such as calcium, which can lead to osteoporosis (brittle b important for skin tone.

The environment we grow up in may also affect physical and physiological growth healthcare, education, safe housing and work environments and secure areas to p children are more likely to suffer from stunted growth and cognitive impairment c other things, iron, iodine and vitamins in their diet. Children who suffer from chr Crohn's disease, will also have stunted growth as the gut struggles to absorb esse water is linked to many different diseases such as anaemia, diarrhoea and typhoi affect growth if untreated. Workplace accidents, includi[illegible]soning due to the u reclaim metals from discarded electrical equipme[illegible]an[illegible]verely affect different lungs, liver and skin.

Growth does not follow a[illegible]oth and continuous curve, but it does follow a fixed vary from ch[illegible]ch[illegible]en if they are identical twins, and different parts of the at different [illegible]f our lives. However, growth is quantitative in nature and eas

Development refers to how the body organises itself within the physical structure o about how we acquire new skills and learn to apply them. Development refers to h physical and cognitive parameters. For example, a two-year-old has the coordinati unable to ride a two-wheeled bicycle. Development also depends on the type of so which we are born, as this will affect the types of experiences we have and what ski

Development does not follow a smooth and continuous curve, nor does it follow a nature, affected by outside experiences as well as inherited traits, and is less easy interpretation.

How do we measure growth?

The Royal College of Paediatrics and Child Health has created growth charts using Health Organisation on Child Growth Standards, which allow health professionals growth progress in relation to children of th[illegible]sex and age (from 0–19) using

Health services also use BM[illegible]dy Mass Index to measure growth. This is a method of calculating whether you are within a healthy weight range using your weight in kilos and your height in metres. To check your BMI, divide your weight by your height twice. For example, a person weighing 60 kg with a height of 1.7 m would have a BMI of 20.76. It is, however, only an indicator of healthy weight. Some people who work out, train or play a lot of sport may have a heavier musculature than others, and their BMI would place them on the scale as obese rather than healthy.

Between birth and the age of two, the human body experiences a huge growth sp stages. Just compare a picture of a day-old baby and a two-year-old and you will body shape, size and ability. This growth occurs through a mixture of innate biolo sensory development. Research has identified two patterns of growth, cephaloca

Cephalocaudal development describes how growth and development start at the head and end at the feet. When you look at a h[illegible]h[illegible]ad, it is much larger proportionately compared to the rest of th[illegible]bo[illegible], with 25% consisting of the head and 75% the r[illegible]f[illegible]body. By the time we reach adulthood, our head is proportionately about 10% of our body length. This is because develop[illegible]the brain takes precedence over the rest of the body. Cont[illegible]he body starts with control of the head. When a baby is born, it head, but during the first few weeks, the baby learns to control its neck muscles t look around. Once this can happen, the shoulder muscles will become engaged a strength in its torso so it learns to roll over. Once it has learnt to roll over, it will s the floor and work out how to come up into a sitting position. From this position, itself up and finally, by around 14 months, walk unaided.

Proximodistal development describes how growth and development start from the centre of the body and gradually move out to the periphery of the body. Development of the head, neck and torso at the centre takes precedence over the development of arms and legs. An example would be that infants develop gross motor skills, such as arm waving, before they develop fine motor skills, such as picking things up.

Proximodi
along the h
out to the p

Both cephalocaudal and proximodistal d[illegible] occur in a fixed pattern and i
for example, does not crawl befo[illegible] up to walking position, it may indicate
such as dyspraxia.

How do w[illegible]easure development?

Development and acquisition of skills occur in four main areas: physical, cognitive, communication and social and emotional development. Although previously child development psychologists believed the acquisition of skills is linked to brain development and maturation, recent studies suggest the process is more complex. Smith and Thelen (2003) suggest that sensorial input, and thus the environment, play a much greater role than previously thought.

Develo
age by
achieve
crawlin
senten

Development is measured by 'milestones', which are achieved within a time and age window, rather than by a specific age. These milestones may differ depending on social and cultural expectations, for example, learning how to write letters and numbers is expected to happen by the age of five in the UK, but not until around seven in Scandinavia. Measuring development is therefore subjective, and personal. A child born in a village in Africa will face a different set of social and cultural expectations that affect the skills [illegible] believe their children need to acquire as they grow, compared to a child born in a metropolitan environment.

The UK Early Years F
statutory framewor
- The Unique Ch
- Positive Relati
- The Enabling E
- Learning and D

Within Learning an
areas of learning, th
secondary.

The three primary
and Emotional, Com
and Physical Develo

The four secondar
Literacy Developme
Mathematics, and E

Development and acquisition of skills are the focus of education curricula and frameworks throughout the world, from infancy through to early adulthood. Adults working and supporting children within these frameworks are expected to provide opportunities for children which will allow them to develop their full potential across a wide range of areas. The skills we acquire can develop from simple to complex at[illegible] adults will achieve the same skill sets within the same time span, or indeed at all. upon a complex mix of innate biological and environmental stimuli.

Innate biological patterns or genetic traits are person[illegible]ut and inherited from affect our speed of growth (stature, height) and what [illegible] look like (colour of hair, affect our personality (see the sectio[illegible]e[illegible]tional development).

Growth and development milestones througho

Growth milestones

Infancy 0–2 years

Growth is fast during infancy, with a general tripling in weight by the end of the fi
the end of the second year. At the beginning, the body is completely out of propo
adult, as a baby's head is relatively large, and their legs re[illegible]ely short, in relation
bones and muscles strengthen and grow, supporting the body, the baby is able to
developmental milestones. Babies are b[illegible]h four soft spots or fontanelles on
sphenoidal, the mastoid and the [illegible]ntanelle. The softness of the fontanell
expand, as it does so ma[illegible]than bone can grow. By the age of 18 months
have fused t[illegible]er s[illegible]e brain will have tripled in weight and reached 80% of
circumferen[illegible]have increased from around 14 inches (35 cm) to 19 inches (48

Early childhood 3–8 years

The body continues to grow and bones will lengthen and muscles grow stronger,
body movements (gross and fine motor skills) and explore their environment. Be
refine their gross motor skills – for example, learn to walk upstairs with alternatin
skip, hop and kick a ball (4–5 years) – as well as refine their fine motor skills, such
writing (4–6 years). A child's height and weight will increase and the body will ap
although legs will still appear short compared to adults, comprising a third of the
body in adults.

Adolescence 9–18 years

At this stage, also referred to as puberty, changes caused by the hormones secrete
body shape and cause rapid spurts of growth to occur. Hormones are chemical mes
blood from the glands in the endocrine system. At puberty, th[illegible] pituitary gland secr
and sexual changes in the body. In boys, the hormone m[illegible]ers the production of te
causes the penis and testicles to enlarge, and [illegible]rt th[illegible] production of sperm. Boys
underarm and pubic hair, and their v[illegible]ce will drop. In girls, the hormone will trigge
the ovaries, starting ovulatio[illegible]m[illegible]struation. Girls will also start to grow under
breasts and their hip[illegible]broaden. Physically, girls will have attained their adult he

Early adulth[illegible]–45 years

In the early adulthood stage, the body reaches full physical maturity. Boys will re
the age of 20, but both genders will continue to develop musculature and gain bo
our peak when it comes to strength, sensory abilities, reaction times and cardiova
some women will become pregnant and have children. Pregnancy alters the phys
internally and externally, as it accommodates the growing foetus, and towards th
will enlarge as the body prepares to provide milk for the baby. At the end of this
perimenopause, experiencing symptoms similar to the menopause, such as hot fl
their menstruation may become irregular. This is due to a drop in oestrogen level
mood swings and emotional ups and downs that may be helped by hormone ther
our bone density starts to lessen. In the brain, neurons start to die off and are no

Middle adulthood 46–65 years

This is when both men and women start to show sign[illegible]ge[illegible]g, such as greying h
wrinkles. People not only start to look older, but may also struggle with vision or
start to suffer from presbyopia, which [illegible]when our eyes lose the ability to change
objects to closer objects. Following conversations in crowded, noisy spaces also b
deterioration of the s[illegible]ory hair cells in the inner ear means we become less able
different sc[illegible]M[illegible]cation taken for chronic illnesses such as diabetes or cardi
physical, se[illegible]nd physiological aspects. During this stage, women experience
levels drop considerably and menstruation ceases completely. Once the menopa
unable to have children naturally. Both men and women will notice a decrease in
more easily, particularly around the middle as the muscle to fat ratio changes. Pe
the discs that cushion between each vertebra of the spine dehydrate and flatten
and some adults may suffer from osteoporosis, where the bones become brittle a

Late adulthood over 66 years

The density of bones continues to deteriorate (osteoporosis), as does muscle stre of brain cells or atrophy) may affect hearing, vision, memory and problem-solving functions less well and as a result people at this stage of life can succumb to relati influenza.

Development milestones

Infancy: 0–2 years

Physical

- Fine motor skills: grasp ⇨ [illegible]d ⇨ [illegible]oint ⇨ shake ⇨ pick up ⇨ throw ⇨ plac making ⇨ feed th[illegible]ve ⇨ build 2–3 block tower
- Gross [illegible]ski[illegible] flex legs when on back ⇨ kick out ⇨ roll over ⇨ crawl ⇨ ⇨ clim[illegible] one step at a time

Cognitive

- Focus on moving objects ⇨ recognise caregivers' faces ⇨ react to familiar so difference between animate and inanimate objects ⇨ understand size relati object permanence (see Piaget) ⇨ understand the difference between 'me' a

Communication

- Cry ⇨ gurgle ⇨ stick tongue out ⇨ smile ⇨ babble ⇨ start to make recogni or two syllables) ⇨ one-, two- and three-word 'sentences'

Social and emotional

- Recognise mother's voice ⇨ imitate facial expressions ⇨ play peek-a-boo ⇨ anxiety ⇨ become angry or frustrated when unable to do something ⇨ play let themselves be comforted

Early childhood: 3–8 years

Physical

- Fine motor skills: drink from [illegible]cup[illegible] build 4–6 block tower⇨ push buttons ⇨ tops ⇨ pencil grip f[illegible]l [illegible]making ⇨ blow bubbles ⇨ unzip and zip up ⇨ m pages
- Gross m[illegible]kills: jump (two feet) ⇨ walk upstairs using alternate feet ⇨ pe skip (alternating feet) ⇨ hop (one foot) ⇨ throw a ball underarm and then o

Cognitive

- Start to categorise objects ⇨ develop an understanding of past and present ⇨ right and wrong ⇨ understand simple mathematical concepts ⇨ learn to rea concentration skills

Communication

- Increasing vocabulary ⇨ talk in longer sentences ⇨ argue ⇨ negotiate ⇨ de syntax and rhyme ⇨ ask questions ⇨ can be understood at least 90% of the the pronouns (I, me, you, etc.) correctly ⇨ follow three-step directions

Social and emotional

- Have different expressions for different emotions ⇨ [illegible]a[illegible] to have a simple se simple jokes ⇨ cooperate with others ⇨ foll[illegible]w [illegible]uctions ⇨ seek help wh together with children and have fri[illegible] cooperate with others ⇨ may be j start to project outside id[illegible]on[illegible]-image (I am good, etc.) ⇨ able to self-re

Adolescence: 9–18 years

Physical

- Fine motor and gross motor skills continue to develop in relation to physical
  expectations. The body is going through spurts of change in relation to horm
  that may affect self-esteem and cause anxiety.

Cognitive

- Reasoning develops ⇨ problem-solving skills imp ⇨ acquisition of basic
  operational stage) continues ⇨ abstract thinking improves (Piaget's formal o
  understanding of more complex theoretical concepts ⇨ reading and writi
  through access to more complex texts and ideas

Communication

- Able to s and hold an argument ⇨ understand jokes, wordplay and sar
  compositional skills ⇨ use persuasion and negotiation to achieve goals

Social and emotional

- Have a close friendship circle ⇨ often feel they are being watched and judge
  'it will never happen to me' ⇨ may engage in risky or irrational behaviours li
  development ⇨ sensitive to real or perceived criticism ⇨ challenge ideas an

Early adulthood: 19–45 years

Physical

- Fine motor and gross motor skills continue to develop in relation to physical
  expectations, although growth in height finishes around the age of 18 for wo
  experiences will dictate which fine or gross motor skills become more import
  stage, indications of age may start to affect gross or fine motor functions, e.g
  decrease in stamina.

Cognitive

- The brain reaches maturity around the age of 22 and continues to function at
  years. At this stage, adults show greater flexibility in their thought patterns t
  Around the late 20s some neurons start to die off, we may start to experience a
  and memory loss. Learning new skills may take longer, and need stronger r

Communication

- Communication skills develop in relation to experiences. However, as brain c
  names and places, etc. may cause communication problems.

Social and emotional

- Previous experience boosts how we cope in social situations, which centre ar
  work. Moral reasoning and self-regulation are key to social and emotional sk

Middle adulthood: 46–65 years

Physical

- Fine motor and gross motor skills will continue to degenerate. Changes in ph
  master completely new skills due to decreases in muscle tone, vision, or prob

Cognitive

- Greater reliance on experience with regard to problem-solving skills, as comp
  learn, and may not fully embed themselves in the [illegible]ology due to loss of brai

Communication

- Degeneration in memory recall affect oral communication skills, for exar

Social and emotional

- Changes in physical and cognitive abilities can lead to low self-esteem and de
  for those who live alone, as they may find it difficult to socialise, continue me
  friendships.

Late adulthood: over 66 years

Physical

- The acquisition of new physical skills is unlikely at this stage of life, and adults
  the loss or impairment of physical skills, either due to general deterioration o
  arthritis or osteoporosis.

Cognitive

- Deterioration in cognitive skills continues and certain medical conditions such
  (around 50% of 85-year-olds will be diagnosed with these diseases) may exac

Communication

- Loss of brain mass continues to impact on memory recall and problem-solvin

Social and emotional

- Loneliness, low self-esteem and depression can have an impact on social rela

A1 Revision questions

1. What are the six different life stages and what ages are assigned to t
2. Define growth.
3. Define development.
4. At what life stage do we reach our adult height?
5. What does 'centile' mean with regard to height and weight charts?
6. What is the difference between proximodistal and cephalocaudal de
7. What is a developmental milestone?
8. Provide examples of growth milestones for each life stage.

A2: Intellectual development across

Basic facts about the brain and brain developr

Neuroscience is the study of the brain. Scientists still have much to learn about h extremely complex organ. The human brain is much larg proportion to our b brains. It lies at the centre of the nervous system eiv g messages from senso commands to nerves and muscles, contr ve ning the body does. The rela enables us to store, organise and e plous amounts of information.

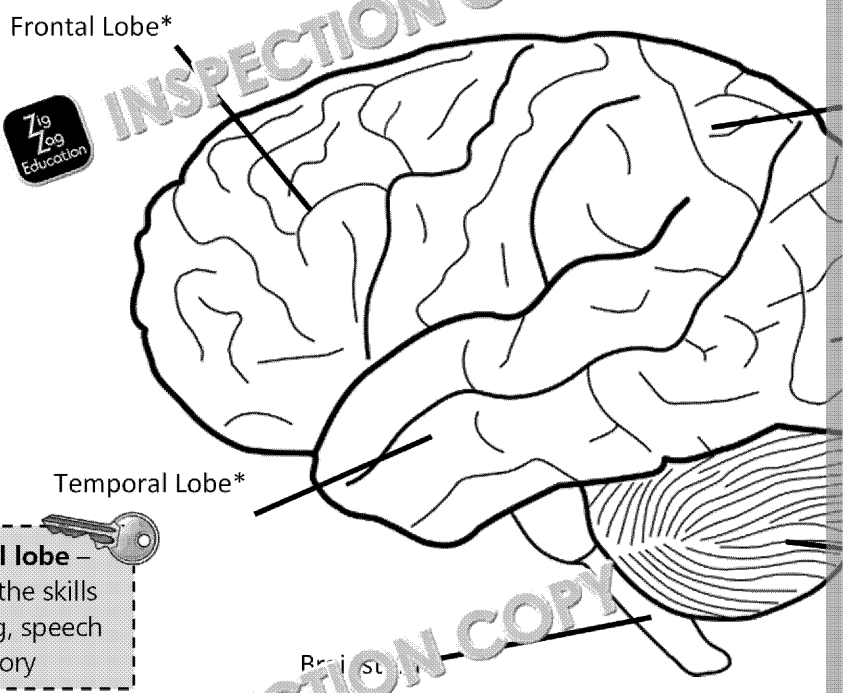
At birth, our s earl all the brain cells, or neurons, that we will ever majority of eurons are not 'joined up', the baby's brain does not function does.

Parts of the brain

The anatomy of the brain is complex, and although neuroscience suggests certain functions such as balance or speech, research indicates that such complex functio to one area. The brain has three main parts.

Frontal lobe – linked to the skills of problem-solving and reasoning, organisation and planning, memory and emotional intelligence

Parietal lobe – linked to proprioceptive movement and coordination



Temporal lobe – linked to the skills of hearing, speech and memory

Brainstem – connects the brai to the spinal cord, and control basic life functions such as breathing and heartbeat

Cerebrum entre for higher learning, information processing and cognitive function, consisting of four lobes, covered by the cerebral cortex and divided into two halves, the left and right hemispheres

*t

Neuroscientists believe that each lobe of the cerebrum has a different function, a
cannot assume that something as complex as the brain can be divided up in such

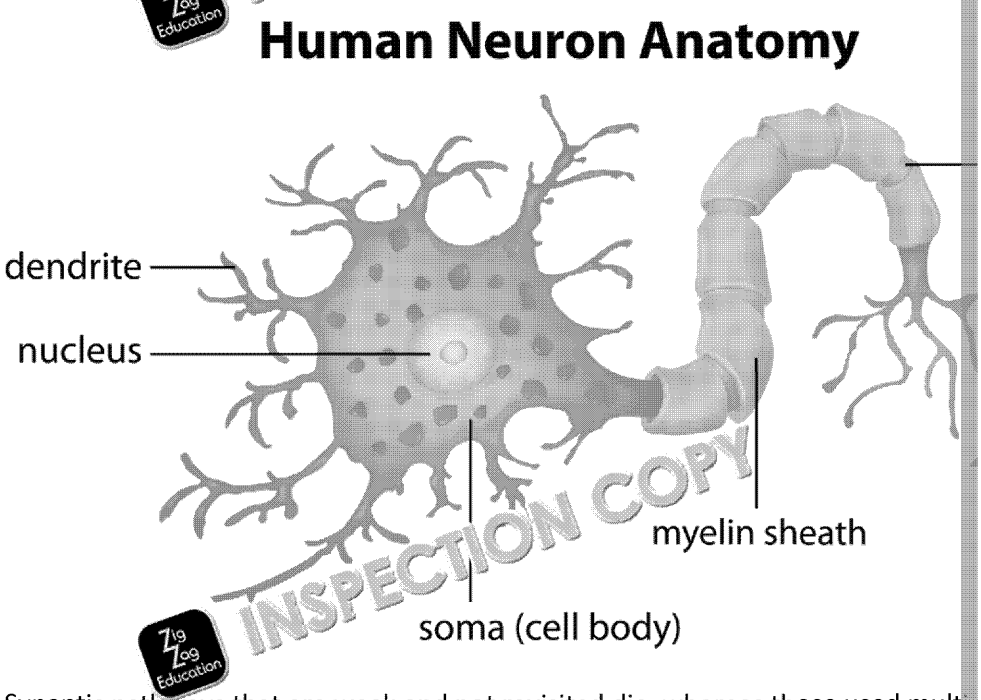
The cerebral cortex, where more demanding neural activity takes place, is a thin c
lobes. The lobes of the brain are extremely convoluted and the cortex closely fol
a result, the surface area is much larger than, for example, a rat's brain, which is s
support the work of many more neurons than would oth[illegible]e be possible. The
also means it can be packed into a much smaller s[illegible].

How does the brain grow and develop?

The brain grows in a fix[illegible]uence. This sometimes happens in spurts, which is
someone is [illegible] l[illegible] a particular skill or understand what an appropriate reac
situations. [illegible]in grows quickly in volume during the first six years of life, reac
adult brain during that time, and will continue to grow, at a slower rate, until arou
some neuroscientists believe development continues until the early 30s. The last
prefrontal cortex, which covers the frontal lobe, and is responsible for functions s
logical thinking and impulse control. Although learning can happen at any time, t
'windows of opportunity' when learning a particular skill is easier than at other ti
is for young children to learn two or even three languages during the first years of
many students face later when learning a foreign language.

How does the brain store information?

The image below shows the anatomy of a neuron. There are billions of neurons i
for sure *quite how many* there are. Each neuron has the potential to connect to t
Neurons are not physically linked together, but work by passing information betw
end of the axon to the dendrite of the next neuron, using [illegible]hical and electrical s
axon and the dendrite is a synapse. Each new exp[illegible]nc[illegible]reates a new synaptic
ensure that the action or connection will [illegible]d it[illegible] in the brain as a memory.
grass. The first time you make a [illegible] flatten the grass slightly, but if you wal
month, you will create a [illegible]rch appears to show that in the first two yea
creating aro[illegible]00 s[illegible]c pathways each second.



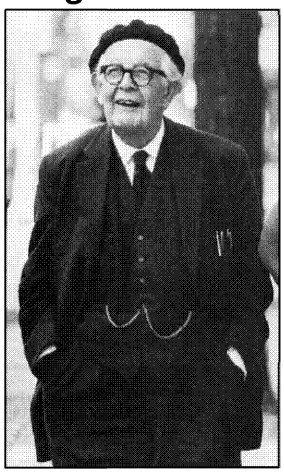
Synaptic pathways that are weak and not revisited die, whereas those used multi
In order to preserve these pathways, the body produces a substance called myeli
axons and prevents the electrical impulses from drifting away. Myelination conti
when the brain becomes fully mature. Everything a baby experiences multiple ti
stored by the neurons.

Research has shown that in young infants neural processing occurs across several hemispheres, but becomes focused in particular areas (for example, in the tempo as the infant matures. Whether these differences in activity at different ages are biological changes, is a question for further research.

How theorists explain cognitive development

The science behind understanding intellectual and cognitive development is immens hundred years or so, certain theories and theorists have gained precedence. Their th challenged and new evidence com[illegible]out generally, they are seen as a founda human cognitive develop[illegible] these theories have given rise to four particular app behaviourist, constructivist, nativist and social-constructivist theories, three of which

Piaget and the constructivist approach to learning



Jean Piaget (1896–1980) was a Swiss biologist and p how children learn started during his time in Paris in Laboratory, where he worked on formalising intellige showed the relationship between intelligence, age an logic applied by children to their reasoning (even thou incorrect) astonished Piaget, and led him to develop a scientific study, genetic epistemology. Central to Piag idea that interactions between the child and the envir structures in the mind. Children are therefore actively passively receiving instruction. Criticism of his work i social, cultural and geographical differences, and new of his conclusions were inaccurate regarding the age a certain things.

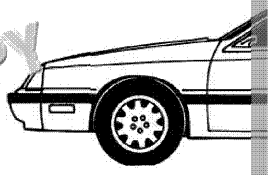
Piagetian [illegible]no	
Schema:	A pattern of action and interaction that, through repetition, establish pathway or memory
Adaptation:	How the structures of the mind alter in response to new impulses
Assimilation:	Using existing structures and schemata to incorporate new learning
Accommodation:	Modifying existing structures and schemata to incorporate new learn
Equilibrium:	Existing schemata can incorporate the information received
Equilibration:	When the processes of assimilation and accommodation challenge sc falls into disequilibrium (out of balance). Equilibration is restored wh are accommodated
Animism:	When children assign the feelings and emotions they understand to following me home

Piaget's studies led him to believe that we pass through four stages of cognitive o stages occur between broadly defined age bands and follow the biological process maturation. Each stage shows a qualitatively different type of cognitive developm moves from one stage to the next, the child will employ different internal structures a complex structures to organise external stimuli. The implication is that old structu new structures, but development does not occur on a smooth, continuous level a only appear when brain matures and the child constructs new knowledge from e age bands assigned to the four stages are only a suggestion as everyone develops rates. However, we will all progress through these stages in the same order.

Piaget used the term 'schema' (plural 'schemata') to describe the mental repres
create to support thinking. They can be simple or elaborate, and if we experienc
it will become embedded in our minds. Imagine, for example, you are seeing a ca
a schema about it:

Attributes of a car:

- four wheels
- belongs to mum and dad
- white
- makes a noise



You will se... ...nd realise that attributes are flexible, e.g.:

- four w...
- belongs ... next-door neighbour
- red
- makes a quieter noise because it is electric

Therefore, because it has four wheels, is white or red and makes a noise, when yo
believe that too is a car. However, a van has fewer windows and may be larger. S
a new schema, similar to the old one but taking into account the differences. You
for cars and one for vans. The same will happen when you see a lorry, taxi, etc. A
accommodate new information we become quicker at recognising differences and
cars, vans and lorries are vehicles. Also, as our language skills improve, we can de

Piaget's four stages of cognitive or intellectual development are sensorimotor, pre
operational and formal operational.

Stage 1: Sensorimotor stage (0–2 years)

Learning at this stage takes place, as the ... suggests, through use of the senses to co... ...vement. At this stage, the child is egocentric, i... ...ties that other people see and understand ... in ... the same way as they do, and is unable to se... ...s from another's point of view. As the child becomes more adept at controlling motor reflexes, such as grasping, their movements become intentional, i.e. they will reach out to grasp something they want.

The five main ... touch, taste a... two additional ... concerned wit... the **proprioce**... personal spati... and body func...

Heuristic play: heuristic comes from the Greek word for 'discovery' – eureka! In child development terms it describes the provision of open-ended items for children to play with, e.g. tubes, balls of different sizes, pieces of material. Children cannot fail or get things wrong when engaging in heuristic play.

A child's cognitive development will m... reflexes, such as rooting and sucking, t... sucking a thumb or returning a smile. ... of four to eight months will be able to ... learn to roll over and sit up. Between e... able to combine and adapt schemata t... intention, e.g. reach out for food and p... this time that in... ...ts develop an under... From 1... ...20... ...onths, schemata are in... ... ...ants investigate objects to fin... ...hem. A good way of engaging their cu...

Object permanence: the understanding that something hidden is still there

Piaget's experiment for object permanence involved showing the baby a ball blanket. If the child became upset, they had not yet reached the developmen permanence. If the child reached for the blanket and tried to uncover the bal developmental milestone.

Implications for cognitive development: ability to for[illegible]nental picture of s understand it is still present

Baillargeon (Baillargeon et al., 19[illegible] ha[illegible]own that object permanence may Piaget thought. She used a[illegible]ficial type of experiment known as a VOE, or babies were habituated to seeing a drawbridge move through 180 degrees. T drawbrid[illegible] two variations were shown, one possible and one impossibl drawbridg[illegible] closed until the box stopped it (possible). On the second, the through the box and the box disappeared (impossible). Babies spent much lo situation, and the implication is they understood that there should have bee permanence).

Stage 2: Preoperational stage (2–7 years)

At this stage, children continue to be egocentric and are unable to understand the shown by the three mountains task. This is a stage when language development c explosion in vocabulary and communication skills. Piaget believed that cognitive acquisition, i.e. you have to understand that something is a dog, before you can a (assimilation and accommodation). The use of symbolic thought in play is seen, i. attributes to objects that are entirely different in form, for example, a wooden blo believe that objects can have the same emotions and feelings as they do (animism development of our communication and social skills. The stage is termed 'pre'ope able to think logically, and apply problem-solving skills to a situation, as shown by implication is that children 'centre' on one part of a task or problem, and are unab influence the situation. By the end of this stage, children have moved from symbo characterised by an increase in curiosity and questioning of those around them. P because he reasoned that children were perfectly aware that they had an enormo heads, but [illegible]na[illegible]are of where it had come from, or how they could use it.

Three mountains task

The task uses a three-dimensional model of three mountains, each of differen different items at the peak, e.g. a cross, a house and snow. Once the child has model, a doll is placed opposite them, so it too is looking at the model. The ch picture that shows what the doll can see.

Results: Children aged around four tended to choose a picture showing what th often choose a picture showing a different view to the one they saw; however, t

Conservation task

With water: A child is shown two beakers of water, each containing the s water is then poured into a thinner, tall[illegible] glass. The child is the same in each glass. Children [illegible] preoperational stage water in the thinner, tall[illegible] glass as the level is higher.

With coins: A child is sh[illegible] coins and they are laid out on the table exact[illegible] the first five coins. Then the second row of c[illegible] without conservation skills will say that there are mor[illegible] in the shorter row.

Piaget theorised that children lack the cognitive skills at this stage to unders reversed, i.e. if the water is poured back into the original beaker the amounts

Research it!

There are many videos on YouTube that show different conservation tasks w

Conservation experiments that have challenged Piaget's results include McGirrigle task (1975) and Martin Hughes' 'policeman doll' task (1979). In the former, a nau and in the latter a doll had to hide from two policemen. Four-year-old children w and the researchers argued that this was because the task used a situation that w children. McGirrigle and Donaldson also hypothesised that, in the liquid conserva changed the glass to a 'different' glass gave a subliminal message to the child that therefore, logically could not contain the same amount of water.

Stage 3: Concrete operational stage (7–11 years)

During this stage, children's cognitive skills develop further and they are able to u reversibility, but only when applied to physical objects (concrete operational). Th more refined logical thinking and they are able to focus on multiple aspects of a situat perspective (this is known as 'decentration'). Children are able to apply inductive something, for example, if every time I stroke a dog I come up in a rash, then I am classification skills become more complex, and they are able to place items in con

In Australia, Dasen (1975) used Piaget's water conservation tasks with Aboriginal conservation skills developed around the ages of 10 to 13 rather than seven to eig were far in advance of Swiss children. The study showed that cultural factors infl

Stage 4: Formal operational stage (11–16 years and onwards)

This stage heralds the development of abstract reasoning skills, and metacognitive metacognitive skills to a task, you use whatever strategy (reading, writing, science solving the problem. Children are also developing skills in deductive logic and syst reasoning to work out what the consequences of their actions might be. Their im reasoning allow them to understand that there can be many different ways of sol children do not need to see a concrete representation of a problem, but are able t representation.

Piaget insisted that everyone goes through these four stages of development; hov half of adults actually reach the formal operational stage. This could be due to cu such as poverty, social disruption or lack of access to education. Piaget himself in many adults only reach this stage in areas that they are interested in. Researc 1982) that students with a better grasp of formal operations do well in mathemat a lack of formal operational understanding does not affect the ability to learn.

Noam Chomsky and the nativist approach to language acquisiti

Noam Chomsky (1928–) is a leading US academic, psychologist and linguist as 'the father of modern linguistics'. His main contribution to understanding to how children acquire language. In the 1950s, his work led him to believe t biological ability to learn languages, which he referred to as a Language Acqu then he has refined his theory into the theory of Universal Grammar.

Before Chomsky wrote about his ideas of how we learn languages, the consensus through imitation and reinforcement (a behaviourist approach). According to beh born with the capability of producing various random sounds. 'Motherese' is the and carers use with infants that reinforces these random sounds. Praise and repe the sounds; for example, if a baby says 'dada' then they might be praised for tryin actually have been talking to the dog!). Chomsky, however, thought that such an creativity but human language.

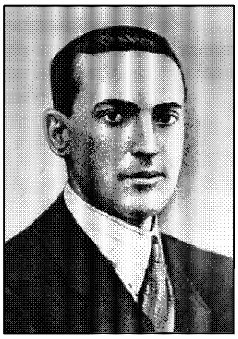
His work in linguistics (the study of language development) led him to believe that language acquisition is biologically based, and we are born with innate mental structures that are solely reserved for learning language. All languages have rules, and once those rules are learnt, the speaker can communicate in whole or partial sentences, and make themselves understood. This ability to absorb the complexities of syntax and grammar is not limited to just one language, which explains why children acquire different languages more easily than adults do. He called this structure Language Acquisition Device and believed that we have a critical period for acquiring language that starts around four months and continues until pubert… learn a language by this time, we will be unable to do so to any great depth or abi… by that time it is easier for us to learn another language, using the information ac… language. This concept of a critical period for language acquisition is widely accep… disputed by linguists, as it is difficult to prove (no one wishes to experiment on a c… children who have failed to receive language stimulation due to abuse, neglect or… difficulties in learning language, although whether this is due only to the lack of la…

A feral …
for man…
been lo…
rarely le…
words. …
Victor, …
France …
in India…
found i…

What evidence does Chomsky offer for the LAD?

- All languages possess similar basic grammatical structures, such as 'subject-v… able to understand this without being 'taught'.
- Learning something requires a particular impetus or hook to hang it on; for e… just by observing other birds, or is there an innate ability hardwired into bird…
- All children learn to speak unless they have a disability, regardless of whethe… to talk.
- Animals cannot learn to talk and make conversation (a few can imitate, e.g. a…
- As children start to apply grammar to their utterances, they make mistakes su… that they do not learn through imitation but are trying to apply grammatical … irregular in some languages
- Children from multilingual families have no problem in separating different la…

Lev Vygotsky and Jerome Bruner, and the social-constructivist a… development

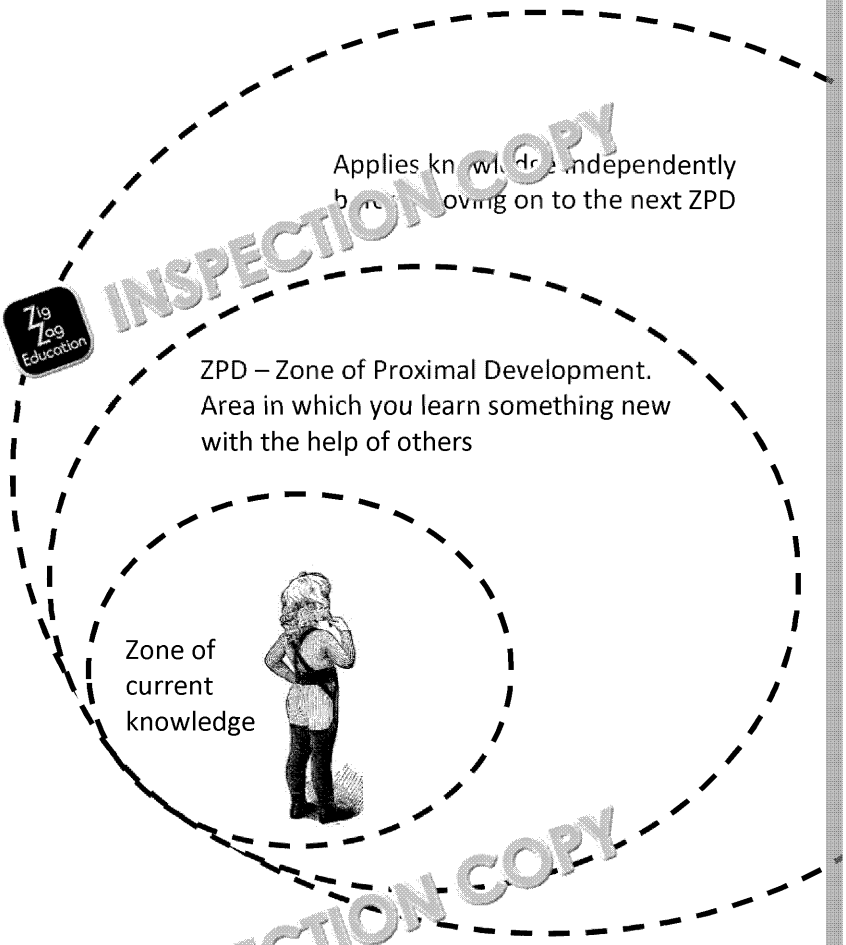


Lev Vygotsky (1896–1935) was a Russian psychologis… Russia. The West did not discover his work until the 19… available. His theories on how children acquire knowle… and the influence of culture are now widely accepted.

Vygotsky was influenced by the communist ideologies of M… on the ideals of the collective working together to create a … Vygotsky considered that cognitive development was not ju… through schemata (Piaget) but also through social interactio… theorised that children exposed to the same biological and … grow up very differently depending on the social and cultur…

Vygotsky's social-constructivist theory has two major aspects: the Zone of Proxim… Knowledgeable Other. Vygotsky agreed with Piaget that children are active in co… he believed that this was not limited to brain maturation. He argued that withou… we would be unable to accommodate new knowledge and understand the social … Social interaction is key to this, as without the input of someone with a wider kno… adult), cognitive development will not happen. Acquisition happens in two phase… internalised within the brain as a psychological interaction.

According to Vygotsky, this learning takes place within the Zone of Proximal Devel
next steps in learning arena, where the learning process builds on what has alrea
diagram below.



Vygotsky also th or reconstruction, which is when we encounter the sam
learning an op ent, as this allows the brain to refine the sensory input it is
control and edge. This has been confirmed by advances in neuroscience an
between the neurons either remain because they are visited many times, or withe

Jerome Bruner (1915–2016) was an American psychologist whose studies
children's learning develops and the way they represent ideas, particularly i
established the Centre for Cognitive Psychology at Harvard University. Both
influenced his work, although he leaned more towards a social-constructivis
theory. He did not agree with Chomsky's LAD theory, once joking that langua
Language Acquisition Support System, also known as 'mother'.

Bruner suggested that cognitive development is linked to the way in which we thi
believed that children have three modes of thinking that are not defined by age o
they are: enactive, iconic, and symbolic.

In the enactive mode, we are physic ng ed in learning a task; for example, d
of a book. This type of thinki late to Piaget's sensorimotor stage of develop
influence physical m

In the iconic e, we are able to create a mental image of something, for exam
an image of our bedroom, or we can use pictures in a book to inform us of a story
read. Again, this echoes Piaget's constructivist theory, preoperational stage and t

In the symbolic mode, which occurs around the age of seven, thinking about som
to direct experience. For example, you can learn about the jungle, but do not hav

Throughout these modes of thinking, Bruner emphasised the role of the adult. Th learning, by supporting the child using sensitive and appropriate interactions and Vygotsky described the More Knowledgeable Other. Bruner also coined the term provides opportunities for learners to return to a particular learning area or subje different perspectives.

Effects of age on memory functi

As seen previously in the section on grow the brain reaches its peak at around t brain will gradually start to deteri will shed neurons, faster from some are from the hippocampus. The hippocampus is responsible for formulating new info into long-term memory and controls our ability to navigate, and it sheds five per Additionally, blood flow to the brain slows due to age-related changes in the c compromises the speed at which the brain functions. As neurons die or atrophy a the way we process information starts to break down too. This age-related loss in all animals.

Psychologists have identified five types of memory:

- **episodic** – specific, personal memories, e.g. what I had for dinner last night
- **source** – how we know about something related to time and place, e.g. wher
- **flashbulb** – memory related to a specific, surprising moment, e.g. winning the
- **semantic** – memory related to words and facts, e.g. different names of flowe
- **procedural** – memory related to how things are done, e.g. changing a nappy

Episodic, source and flashbulb memories deteriorate the most, whereas semantic slower to fade. Many people have a problem with semantic memory, as verbal flu cortex where blood flow decreases the most as the brain ages. As we age, the bra which makes it more difficult to retrieve information at the time we need it. We a new skills, or remember the names of people we have just met.

Although people can expect this general deterioration, it happens at varying rat certain things such as substance abuse, poor nutrition, lack of exercise or inherite decline in memory function. In late adulthood, a deterioration in brain function ca of Alzheimer's disease. Dementia and Alzheimer's are two different types of illnes similar characteristics.

More information on dementia and Alzheimer's disease is in Chapter 3 of this boo

Dementia is a syndrome, not a disease. The term 'syndrome' refers to a range of together define a particular medical condition. People suffering from dementia m symptoms. Although there is no cure for dementia, studies have found that exerc can alleviate symptoms.

Symptoms include:

- memory loss – particularly short-term memory loss
- decrease in reflective ability – becoming unable to judge what is required or event, such as dinner or shopping
- decrease in concentration and mental sharpness – forgetting where you are about everyday things
- language skills – frequent and long pauses when speaking or difficulties in fo
- understanding and empathy – changes in mood and emotional response to
- coordination and movement – clumsiness, difficulties with spatial awareness
- loss of social skills – inappropriate behaviour, inability to converse and gener

Alzheimer's is a disease, and is a progressive medical condition for which there have dementia will also have Alzheimer's disease. In Alzheimer's disease, the bu compromises neurological function and slowly destroys it, producing dementia- disease is not a natural result of the aging process, and can also affect people in life; this is known as Early Onset Alzheimer's disease.

A2 Revision questions

1. Certain areas of the brain are associated with particular functions. W associated with whi
   - cere
   - c m
   - pa lobe
   - temporal lobe
   - occipital lobe
   - frontal lobe
   - brainstem

2. What is a synaptic pathway and why is it important?

3. What are Piaget's four stages of learning and development, and at w

4. What is object permanence, and when do infants understand this co

5. What does Piaget's constructionist theory teach us about the term 'c can a child understand this concept?

6. In Piaget's theory, what does the word 'schema' mean?

7. What two words does Piaget use to describe the way our brain proc

8. What does LAD mean?

9. Explain what Vygotsky's ZPD mean and how this relates to Vygotsky' of de

10. How many modes of thinking did Jerome Bruner identify in children, each mode differ?

11. How many types of memory have psychologists identified, and what

12. Why is dementia different from Alzheimer's disease?

A3: Emotional development across t

What do we understand by the term 'emotiona

Emotional development starts at birth and continues throughout our lives. Influe
are many and varied, and include social experience, our re[illegible]onships with others,
into which we are born and, not least, inherited p[illegible]na[illegible]emperament and chara
emotional development are:

- awareness of how one is per[illegible]ling
- sense of self – how [illegible], personal traits
- awaren[illegible]f e[illegible]s and feelings in others
- develo[illegible]cially acceptable ways of expressing feelings and emotions
- forming secure attachments and relationships
- self-regulation of feelings and reactions to everyday experiences

Babies are vulnerable and defenceless beings who require 24-hour care and attention to meet their physical and emotional needs. If those needs are not met, they may 'fail to thrive'. Babies who do not experience caring and loving relationships are more susceptible to toxic stress.

What
Corti
adren
we en
situati
muscl
of ins
so it is
narrov
pressu
Sustai
linked
cardio

It is perfectly normal for us to experience stress, even at a very early age. When we encounter strange or frightening situations, our heart rate rises, breathing quickens and the adrenalin gland produces cortisol, the so-called 'fight or flight' reaction. Babies and infants need to have their stress levels managed for them, relying on the interactions of loving caregivers (soothing, stroking, using soft voices) to buffer their exposure to what has caused stress levels to rise, allowing cortisol levels to return to normal. If cortisol levels remain high due to a lack of a soothing emotional response, infants will experience toxic stress. This will have an effect on brain development, as synaptic pathways associated wi
loss will stre[illegible], rather than those associated with coping and self-regulation.

John Bowlby (1907–1990) was a British psychoanalyst who is considered the
In 1951, Bowlby was involved in gathering data from social workers and psych
the effects of maternal deprivation on homeless or disturbed children for the U

The reports he gathered were all similar and he surmised that maternal depriv
profound impact on children's emotional development. His work has influence
which government agencies interact with vulnerable families.

John Bowlby's theory of attachment proposed that children enter the world biolo
preprogrammed to form attachments with others. It is a vital part of an infant's b
survival mechanisms, on a level with the innate reflexes of sucking and crying, as i
reinforces the need to stay close to the mother. Additionally, the mother is biolog
preprogrammed to respond to these innate reflexes and survival mechanisms. W
attachment, vulnerable and fragile babies may grow up exhibiting emotionally ins
behaviour. Attachment is achieved when a child is held, allowing them to forge a
emotional bond with a[illegible], responsive adult, usually the mother. Feeding a ba
keeping the[illegible]m [illegible]playing with them is not enough to create this bond.

Bowlby also recognised that the environment had a strong impact on attachment
devised the term 'internal working model' to describe how an infant subconscious
behaviour and thinking subliminally from interactions with others and the environ
how we understand our place as an agent in the world about us, and how we exp
and react to what we choose to do and how we choose to do it.

Bowlby describes four stages of attachment:

- The pre-attachment phase, 0–3 months. Infants cry in order to draw the atte baby recognises. The soothing and caring reaction of the caregiver gives rise
- The indiscriminate attachment phase, 3–7 months. Infants recognise they ha will show a preference for the main caregiver.
- The discriminate attachment phase, 7–9 months. Infants are strongly attach will show emotional distress and anxiety when they are separated.
- The multiple attachment phase, 9 months and over. Infants can have strong multiple care caregivers.

Temperament and environment will have an effect on the age of each stage.

> **Mary Ainsworth** (1913–1999) was a developmental psychologist from the U both with John Bowlby at his clinic, and in Uganda, studying mother–child at her return to the USA in 1960, she developed the Strange Situation approach attachment relationship between a child and their caregiver.

The Strange Situation experiment examines the attachment level between a careg 18 months, and takes place in a room with two chairs and some toys. There are e which takes about 20 minutes:

1. Caregiver and infant are shown the room where the experiment will take pla
2. Caregiver and infant come into the room and are alone for a while.
3. Stranger comes into the room and joins the caregiver and infant.
4. Caregiver leaves the room, leaving the infant alone with the stranger.
5. Caregiver comes back and stranger leaves the room.
6. Caregiver leaves the room so the child is completely alone.
7. Stranger comes back into the room so it is just the stranger and the infant in
8. Caregiver comes back into the room and stranger leaves.

Observations take place using a precoded list to record reactions and interactions

Ainsworth concluded there were three different types of attachment between car attachment and two types of insecure attachment: anxious avoidant and anxious

Children who show secure attachment behaviour happily explore the toys when th when the caregiver leaves and become subdued and unsure. When the caregiver happy. When the caregiver is not present, the child will avoid the stranger, but or show more interest in the stranger.

Children who show anxious avoidant behaviour are insecurely attached and uncon there or not, and are not particularly interested in the toys. They show little emot and avoid both the stranger and the caregiver.

Children who show anxious resistant or ambivalent behaviour are insecurely attac toys when the caregiver is there, and are immensely distressed when the car interact with the stranger and may even appear to be afraid of them. When the c stay close to her but are resentful and resistant to the caregiver's attempts at com

These are the three main forms of attachment that Ainsworth uncovered in her re third insecure category (fourth category overall), disorganised/disoriented attachm type of insecure attachment style will cry when separated from their caregiver, ha is there and may even rock or hit themselves. Such children have often experienc show fear of their parent or caregiver.

As with any experiment involving emotions and personal interactions, certain limi
- Is the experiment itself culturally biased – do Chinese families exhibit the sa
- Has a traumatic event such as miscarriage, asylum experience, etc. influence
- Is 20 minutes long enough to observe such complex interactions?
- Could results be skewed if one of those involved in the experiment is feeling

Many different stressors can affect how the attachment b between a child an in the figure below:

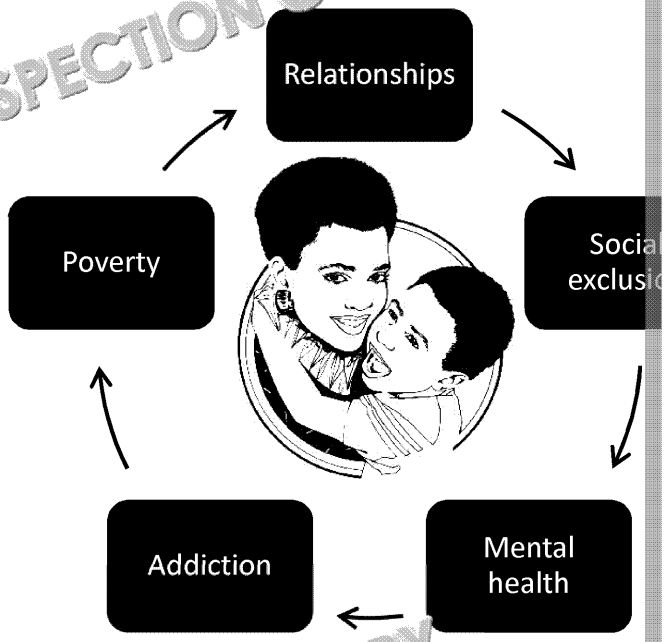


Figure showing attachment stressors

These stressors can affect us at any time during our lives and have a greater or les strength of the support we receive from families, neighbours, social services and

How stressful relationships affects attachment

There is a reciprocity in relationships that is not only influenced by sociocultural n by the temperament and traits each person has. The way we are raised by our ow and culture we live in, will influence parenting style and expectations. There are f authoritative, authoritarian, permissive and uninvolved. Each style has its own wa parents use a mixture of styles depending on the situation. Parenting styles play a emotional development.

Parenting style	What is the parenting like?	In
Authoritarian	Structured, rule-driven, use of physical punishment, children may not question	Inability to pro things wrong, h behaviour or vi
Authoritative	Rules that may be discussed, firm but f rewards not punishments, set so ble limits sometimes aft	Responsible, ha for rules (social choices
Permissi	Leni set limits (only when), consider themselves friends of their children	May struggle a to understand a self-centred, m esteem and de relationships
Uninvolved	Neglectful, unable to parent, overwhelmed by responsibility of having a child, avoidant, may have dependence issues (drugs or alcohol)	Unhappy, strug academically, m addictive beha relationships

Faced with a particular parenting style, children and adolescents will soon learn w
either get what they want or avoid punishment. Montandon (2001) identified te
use: conformity, circumvention, wearing the parents down, vociferous defeat (co
shouting), negotiating, arguing, bargaining, substitution (have two choices, e.g. ei
accompli (just do it anyway and risk the consequences) and terrorism (attacking p

Temperament governs how we tend to behave when faced with a situation, and
is also a factor in the success or failure of a relationship. Psychologists believe
that temperament traits are genetically inherited from our parents.
Psychologists Stella Chess (1914–2000) and Alexander Thomas (1914–2003)
researched the different characteristics of babies, looking at how easily they
were soothed, whether they were active or passive, etc., and concluded we are
born with one of three basic temperament characteristics: easy, difficult and
slow to warm up.

Easy babies generally adapt well, are happy, easy to soothe and feed and sleep w
settle and less happy, they cry more, sleep less and have irregular feeding pattern
show their emotions and take time to adapt to new foods or routines, although o
generally happy. They later expanded on this research and suggested that there a
temperament traits.

Thomas and Chess's nine temperament traits:

1. Activity level
2. Distractibility
3. Intensity of reaction
4. Regularity (e.g. sleep patterns)
5. Sensory threshold
6. Approach/withdrawal
7. Adaptability
8. Persistence
9. Mood

Thomas, A and Chess, S (1977) Temperament and Development, *(New York, Brunner/Mazel)*

Their work also showed that
matched that of the parent th
led to stronger and better att
example, if a parent has an a
it difficult to connect with the
Stress between the goodne
attachment.

Our temperament tends to st
thus affects the way we appr
changes in routine or unfores
connected to our self-concep
Children who do not have acc
loving role models during infa
to have lower levels of self-es
and more susceptible to depr

How poverty affects attachment

In 1995, the United Nations adopted two definitions of poverty, absolute poverty

Absolute poverty is defined as:

'a condition characterised by severe deprivation of basic human needs, includi
sanitation facilities, health, shelter, education and information. It depends not
access to services.'

Overall poverty is defined as:

'lack of income and productive resources to ensure sustainable livelihoods; hu
health; limited or lack of access to education and other basic services; increase
illness; homelessness and inadequate housing; unsafe environments and socia
... lack of participation in decision making and in civil, social and cultural life.
mass poverty in many developing countries, pockets of poverty amid wealth i
livelihoods as a result of economic recession, sudden poverty as a result of dis
low-wage workers, and the utter destitution of people who fall outside family
institutions and safety nets.'

*Source: United Nations (1995), The Copenhagen Declaration and Programme of Action, W
6–12 March 1995, New York, United Nations*

There are two ways of measuring poverty. Each creates a poverty 'threshold', eit
(currently 60%) of median income, or by measures of deprivation (not being able
Median refers to the central point of a range, where equal numbers of household
point. Using the standard of 'deprivation' as a base allows for the inclusion of diff
standards (i.e. the type of phone you own, or the number of times you can eat ou
measures of deprivation is subjective and may not take into account cultural facto
present, the government uses median income as the mark for the poverty thres

Poverty can affect attachment in many w families below the poverty thresho
struggle with daily living, perhaps holding down several part-time jobs. They are
drained, spend less time and energy interacting with their children and may reso
techniques (e.g. emotional detachment, neglect and abuse). Parents who lack money to
essentials for children will experience feelings of guilt and helplessness as th
may not be able to afford laptops or Internet access, which affects education outc
devices, will lack supportive adult role models, and lack of secure attachment may
peer groups for emotional support, struggle with self-esteem issues and become i
behaviour. Families living under the poverty threshold often live in unsafe housin
have a greater likelihood of experiencing substance abuse, violence, health issues
homework or relax, all of which are stressors that impact on the attachment bond

How social exclusion affects attachment

In 2007, a report submitted to the social exclusion task force defined social exclusion as:

'...a complex and multi-dimensional process. It involves the lack or denial of resources, rights, goods and services, and the inability to participate in the normal relationships and activities, availa to the majority of people in a society, wh economic, social, cultural or poli affects both the quality of individuals and the equity and cohesion of society as a whole.'

Source: The I mensional Analysis of Social Exclusion, Levitas et al., 2007

Issues that might lead

- Peripatetic lifestyle
- Mistrust of state in
- Adult level of educ
- Unsafe environmen
- Access to informati
- Transport availabili
- Lifestyle and cultur
- Unemployment
- Disability and othe mental health issue

Social exclusion can affect attachment because it isolates individuals and groups, of society. Isolation may mean that families make poor or uninformed choices. F have disabled children will experience greater stress and face more difficulties tha healthcare, education and other services, which will affect personal relationships, Socially excluded families may struggle to maintain a strong social network and n which also can affect the ability of parents and children to maintain secure and st

Social exclusion can also be a choice made by certain groups for personal, religiou may strengthen attachment bonds between members of that group; for example, ethnic or religious minorities, due to the shared understanding of being different They choose not to engage with the majority as they wish to keep their independe

How addiction affects attachment

Addiction is considered by many healthcare experts to be a disease and a mental chronic obsessive behaviours that can be treated. The damaging behaviours purs brain processes and reward functions. These dysfunctional emotional responses supp downward spiral of craving and dependency.

It is unclear why some people become addicts, although genetic, psychological and temperament factors probably play a role. Emotional responses to pleasure and reward are controlled in the brain by the neurotransmitter dopamine. A person with low levels of dopamine may be more at risk of developing addictive behaviours as they are trying to increase dopamine levels.

Types of addictio
- Prescribed m
- Non-prescrib
- Alcohol
- Gambling
- Gaming
- Certain food
- Smoking

Addiction may become part of a person's lifestyle due to:
- a need to blot out unpleasant emotions (abuse, poverty, war, death)
- depression and unhappiness with life
- a need to feel confident and in control
- a lack of self-esteem
- lack of friends / someone to talk to
- work pressures and inability to cope with stress
- inability to come off prescribed medication
- mixing in a sporting environment where the use of performance-enhancing d

Addiction often starts in adolescence or early adulthood when peer pressure is at of society and affects males and females regardless of ethnicity.

Addiction can cause psychological imbalances such as extreme mood swings, para emotional development, which affects personal relationships and attachment. Th the lifestyle of a family, leading to social exclusion, poor nutrition and emotional a children. These environmental factors may affect the security of attachment bon attachment and poverty and social exclusion). Addicts may struggle with parentin involvement in their child's welfare, education and upbringing, focusing more on t drug addicts will experience withdrawal symptoms after birth from the drugs used pregnancy, affecting social and emotional interactions with caregivers.

Health stress: nosocomial infection may also affect attachment. HIV, hepatitis, STDs, disease can develop as a result of addictive behaviour, and children born into a fa risk of developing asthma and other lung-related illnesses. Research into the effe families shows an increase in stress, depression and anxiety levels, which affects s relationships (Coyne, 2006).

How mental health issues affect attachment

In the 2016 review of poverty and mental health*, it states that one in four adults experience mental health problems to some degree in any year. The review also people from certain groups are more likely to be affected by mental health issues.
- young people
- looked-after children
- adults, children and young people living in poverty
- children and young people living in domestic or substance abuse households
- adults with a history of domestic violence and substance abuse
- travellers
- asylum seekers
- homeless people
- isolated rural people

** Poverty and Mental Health: A review to inform the Joseph Rowntree Foundation Mental Health Foundation, Elliott, I (June 2016)*

Additionally, mental health issues are likely to affect a greater percentage of wom

Parents who struggle with mental health issues will often find parenting and raisi
whelming. Mental health problems may lead to issues with lifestyle (substance a
health (over- or underuse of prescribed medicines or the side effects of prescribe
others (feeling misunderstood, angry and isolated) and money problems.

A lack of support within the community and health services can affect the family
children becoming the caregivers for the parent(s), affecti e opportunities th
complete their education and ultimately work to s p, or e family. Poverty may
to the periphery of society, facing social n, living in poor housing conditio
feeling isolated and ignored. Iss s w i ental health can also affect employabil
their families.

During adol e, more than at any other life stage, stresses and pressures can
including depression, anorexia, drug-related psychosis and self-harm. It is believe
problems begin during or towards the end of this life stage, and is particularly hig
in care.

Asylum seekers and refugees may feel even more isolated and excluded than othe
problems and cultural differences. Many struggle with the trauma of their exper
create a new life for themselves.

Explanation of theories about personality deve

How do our personalities develop? Are we born with them or do they evolve? Th
emerges and evolves through social and emotional interactions with others and th
not to be confused with temperament and is unique to every individual. Tempera
trait that provides the fundamental characteristics that i ce personality deve
canvas on which personality is painted.

Personality develops through i ract s with the environment, cultural expecta
techniques, etc. How it d o will be influenced by the way our temperament
and act in d t s ations. Our personalities can change throughout our lives
experiences counter, which means everyone is unique.

Sigmund Freud (1856–1939). Father of psychoanalysis. His Structural Mod
components:

1. **Id:** drives basic needs and urges. We are born with this.
2. **Ego:** controls the id, and acts as a moderator between the id and the sup
3. **Superego:** develops over time and contains all values, morals and ideal
   families and the sociocultural environment

The libido drives all three components. Freud believed that our behaviour is contr
particularly primal sexual urges. The tensions that arise through controlling these
released, which gives pleasure. As a result, psychosocial development influences
constant tension between the id, ego and superego can l d o anxiety and depre

Sigmund Freud was the first to develo theories about how personality develops.
psychoanalysis developed, oth s can e forward with different theories, including
(1902–1994). He belie s t e was more to how our personality develops than
regard to h ocia ility and the desire we have to be part of a group and lead
an eight-sta ory of human personality development, which links to life stage
birth to death.

Erikson's Stages of Psychosocial Development is interesting because it shows how how successfully we tackle the crises and social conflicts we encounter. Erikson d stage we encounter a crisis or positive versus negative outcome. How we react to at the end of each stage depend on social influences, relationships and interaction contributes to the next stage, so if we do not complete a stage successfully by res our personality will remain for the rest of our lives. The ages given to each stage a during the adult years, as events such as marriage, work and having children can h than the narrow bands suggest.

Erikson's eight Stages of Psychosocial Development

1. Trust versus Mistrust: infancy (birth to 18 months)
   Positive outcome dependent upon the type of care and affection the chil are looking after them and establishment of secure attachment.
2. Autonomy versus Shame and Doubt: early childhood (2–3 years)
   Positive outcome dependent on developing independence (e.g. toilet tra self-worth; a negative outcome would be feelings of shame and anxiety.
3. Initiative versus Guilt: preschool (4 to 5 years)
   Children are finding ways to control and use their environment, and figu Children need to understand that there are boundaries to their behaviou ashamed or fearful.
4. Industry versus Inferiority: school age (6–12 years)
   School years and learning how to cope with social and academic require feelings of inadequacy and low self-worth. Conflicts between success an interactions and the development of empathy.
5. Identity versus Role Confusion: adolescence (12–18 years)
   'Who am I?' and 'How do I fit in?' Positive relationships are important as confusion, crisis, experimentation and conflict. Success leads to a positiv confusion and lowering of self-esteem.
6. Intimacy versus Isolation: young adulthood (19–40 years)
   Looking for affectionate and close relationships with others and experien succeed but they do not. Those with low self-esteem will struggle to esta are more likely to experience emotional isolation, even within a relations loneliness and depression.
7. Generativity versus Stagnation: middle adulthood (41–65 years)
   Family, work, supporting the community and creating a legacy that helps stage. Less successful adults will feel disconnected and unproductive. Ad life' crisis, and either take steps to change things or stagnate, feeling bitt
8. Ego Integrity versus Despair: maturity (66 years to death)
   Positive outcome when adults have a sense of fulfilment and accomplish experience despair, bitterness and depression. Everyone has things that but Erikson argues that those who have a sense of contributing to society children will be more satisfied.

Further research into personality has identified five core personality traits that influence how we approach interactions and experiences. The theory is that everyone shares some or all of these traits, but they exist at different levels in each person. Research has found that these five traits are not only stable across our lifetime, but also common to cultures and societies around the world (McCrae et al., 2005). This implies that these personality traits may have a biological origin, are key to how we develop as social beings, and exist in parallel or in addition to temperamental characteristics.

Five core
OCEAN:
Openness
Conscien
Extravers
Agreeabl
Neurotici

What does each of these traits infer about personality?

Openness This relates to how we engage with new ideas and pers high score in this trait are creative, imaginative and int things. Those who obtain a low score in this trait strug are more traditional in their mindset.

Conscientiousness This relates to how we plan and control things. Those v trait are not impulsive, and are goal-oriented, thoughtfu obtain a low score in this trait are disordered, egotistica

Extraversion This relates to interactions with others. Those who obt seek others out, are assertive, talkative and animated. in this trait are likely to be shy and introverted.

Agreeableness This relates to how we relate to others. Those who obt altruistic, kind and trusting. Those who obtain a low sc manipulative, selfish, ambitious and competitive.

Neuroticism This relates to how we relate to our own needs and pro high score in this trait may struggle with depression, ha pessimistic. Those who obtain a low score will be more stable.

The development of self-esteem

Self-concept is a general umbrella term for the three areas relating to how we perceive ourselves in relation to others: ideal self, self-esteem and self-image.

Ideal self: is a personal idea of what we would like to be.

Self-image: is our actual self and how we define ourselves (by gender, work, relationships or body image).

Self-esteem: is how positive we feel about ourselves. If we have high levels of self-esteem we feel confident, optimistic and do not worry about what other people think.

Ideal self

Our self-concept can change depending on social interactions and personal thoug coincides with reality. We are often highly critical of ourselves, and have a distort or our ability. Psychologists such as Carl Rogers believe a positive self-concept a interactions that satisfy our need for approval and affection. If parents only provi are met, the child will grow up feeling unloved and not good enough or worthy of psychologist Susan Harter, the closer our level of self-image is to the image of our confident we will be. A disparity between the two may give rise to confusion, esp lead to negative outcomes.

Our sense of self develops as we interact with the world around us. Babies as you establishing a sense of self as they interact with caregivers and toys, imitating the move. Children's ideas of self-image focus first on physical attributes, such as hei dab of red lipstick on a baby's nose and then sit them in front of a mirror, they wil they are beginning to develop a self-image will they touch their nose. Around the start to apply categories to themselves, for example, age and gender.

In early childhood, children start to compare themselves to others and attribute negative or positive characteristics to themselves. Personality and temperament will affect the way children process feedback from others about their work, clothing, hairstyles, etc. If feedback does not correspond with the child's image of their ideal self or self-image it can negatively affect self-esteem.

Attributi
skill or ch
self-estee
swimmin

As children move into puberty and adolescence, the pressure from friendship grou increases. Children who already have low self-esteem will struggle to cope and ha At the same time they are coping with physiological changes caused by hormones reactions. The adolescent learns to create 'multiple selves' that act differently de themselves in. There will be the self that interacts with parents compared to the a group of peers compared with the self in a romantic situation. Learning to differ selves is a huge part of our personality development, and success depends on our image. The ability to organise our personality into different selves depending on t throughout the rest of our lives.

Charles Cooley (1864–1929) was an American sociologist who developed the concept of 'the looking-glass self'. It refers to the way our self-image develops due to the reactions and comments of other people. It starts in infancy and continues through social interaction (for example, due to the effects of Alzheimer's).

The looking-glass theory (Charles Cool

First, we imagine how we seem to others

Second, we react in a way that we think

+ that judgement.

Third, we use other people's judgements

develop our self-image.

Cooley recognised that we are born as social beings, and soon learn that certain a might cry because they are wet or hungry, and being fed or changed is enough, bu will get other types of reactions, hopefully affectionate ones, and those responses and understanding how others see us. If parents or others, for example, continua clumsy, then the child will always believe it no matter how clever or well-coordina buried deep inside our self-image, will be difficult to change. Development of the ability to see ourselves as others do, whether those mirror images are justified or unique to humans.

Are you part of the in-crowd?

The looking-glass theory has come in for criticism as it does not take into accoun groups and out-groups. An in-group is the group that you identify with and feel and culturally, or because of your gender or interests. An out-group is one with w groups will have a stronger influence on a person's self-image and self-esteem.

Factors involved in the development of positive or negative self-esteem and self-i

Factor	How it affects self-esteem an
Home and family relationships	Our families influence the way we think, act and be relationships will support the positive developmen Parenting styles and expecta ns will also have a r care, adoption, etc ve a negative impact on
Educational environme	Learni nv nments that are appropriate, with a ere t earning styles, will influence positive dev ch as bullying, public singling out by teachers or a positive development.
Society	Society and the cultures within society set certain s are not always easy to follow, but influence the wa They are part of our in-group, and may also becom values and choose others.
Mass media	Images projected through TV, advertising, etc. affec self-image, particularly in adolescence and early ad
Criticism and pejorative comments	If someone continuously labels you as lazy or shallo that person is right, even though it is not true. Criti to accept, especially if it appears to be unreasonabl on how a person looks or how they are dressed easi
Abuse	Abuse of any kind, whether neglect, psychological, negative effect on all areas of our self-concept.
Life events	Events (e.g. divorce, redundancy, war, natural disaster) th strong net elliers and secure attachments wil Feeling overwhelmed, out of control and unable to ppening can cause feelings of incompetency and
Att ent	Success, recognition and attainment support feelin successful you feel you are in comparison to others attempt something that is out of your comfort zon
Popularity	Approval from peer groups, such as friends and fam and self-image. We feel confident and proud when something and feel liked and well regarded.
Disability and other medical issues	Support and understanding of the disability, both a support feelings of self-worth and self-confidence. or supportive environments will have the opposite mental health, pain management, cancer treatmen isolation and impotency.

Moral development

When and how do we learn what is right f wrong?

Morality concerns the ch e make and whether they fit together with the expectation e society and culture we live in. It is linked to the theories be f-concept (ideal self, self-esteem and self-image). A person with low self esteem is more likely to be indecisive and have no opinion about issues, so may have lower moral values. Alternatively, they may just follow the moral values of the group they associate with, even if they feel they are wrong. If you are confident in your self-image and self-esteem you will be more decisive an willing to take a stand.

Theories differ on how we develop a sense of morality. Psychoanalytical theories on innate destructive egotistical drives that need to be controlled, whereas social believe we are born as a moral 'blank slate' that has to learn acceptable codes of cultural interactions. Maybe, as Piaget believes, children construct their morality assimilation of information from the environment, linked to stages of developme

Piaget's stages of moral development loosely follow his st of cognitive development. From the ages of zero to ve s, he considered that children were pre-moral tic). At this stage, they are discovering the ef t own actions have on the people and environm them. This changes between the ages of f nd , when children start to understand the concept of ow to follow them and the consequences of not following the seven and 11, children become engrossed in the concepts of fairness and justice begin to understand that not everyone should be treated in the same way, for ex educational needs will need more support in class than an A* student.

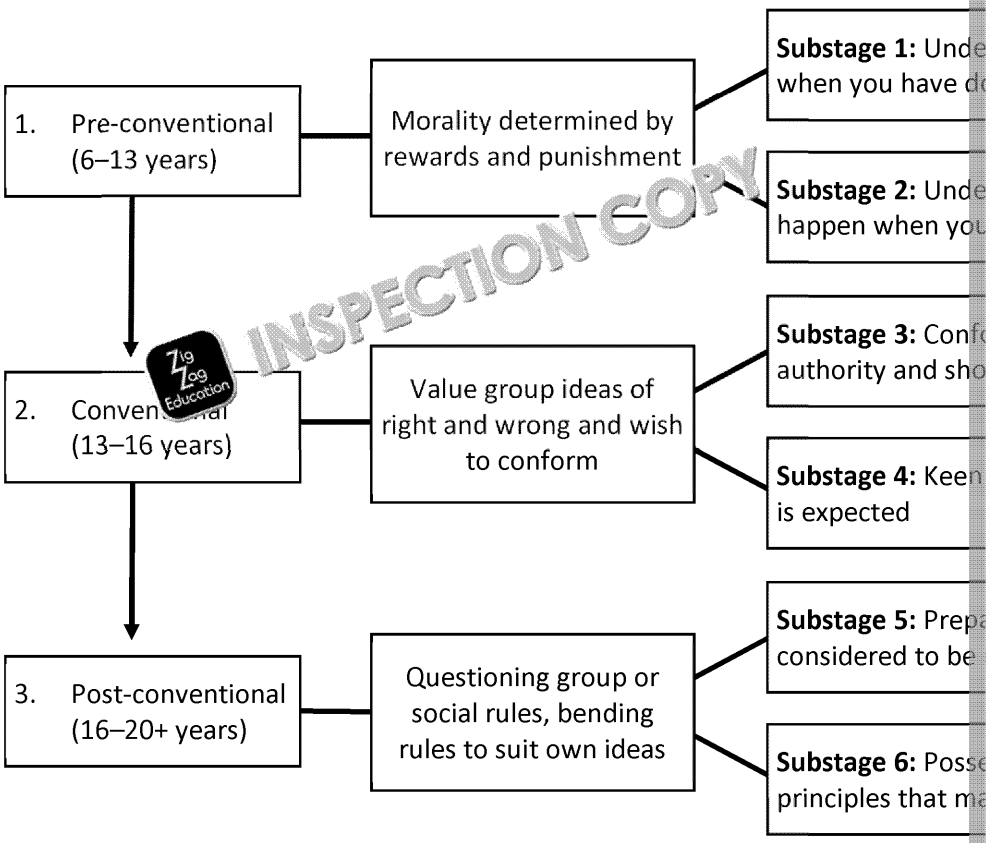
Piaget – St	
0–4	Pre
4–11	Mo
11+	Mo

Laurence Kohlberg (1927–1987) was a psychologist who extended Piaget's ideas, of moral development, with each stage divided into two substages (some refer to stories about moral dilemmas to determine levels of moral judgement. For exam told the story about a man whose wife was dying of cancer. The drug, manufactu expensive for him, but the chemist would not lower the price, so the man stole th series of questions, such as 'Was it right to steal the drug?' or 'Would it make a di stranger?', and correlated the answers according to age. The study was longitud at first 10–16 years, who were followed up at three-yearly intervals to see how th

Kohlberg's stages only start at the age of six because h s dered children were purely concerned with what happens to them, wi n derstanding of what is r children first learn moral values throu h a t viourist approach, through reward they reach the end of the first ge (-conventional; substage 2), they recognis aspect to getting wha , and will consider a situation more from the aspe from a pur t c rong viewpoint.

During the second stage (conventional), the moral development of children takes and an understanding that sometimes you can get it wrong, even if you meant w fairness and should not be broken. By the time we reach the third stage, howeve changed and we question the rules that bind society, particularly in relation to pe prepared to break them.

Kohlberg's three stages of moral development



Kohlberg's ideas about how moral growth d[illegible] important to understandi[illegible] when we make a moral decision. D[illegible] what moral action to take is also de[illegible] possess to make a decision [illegible] what is right and what is wrong. One criticism [illegible] biased and cult[illegible]

A3 Revision questions

1. Which hormone is associated with stress and toxic stress?
2. What is toxic stress and how does it affect babies?
3. What did John Bowlby call his theory on mother–child relationships, of this theory?
4. What are the four stages in B[illegible] by theory?
5. Mary Ainsworth's research into attachment theory led her to devise What [illegible] eight parts of the actual task?
6. What relationship types between parent or caregiver and infant did using the 'Strange Situation' task?
7. What three main temperament characteristics did Thomas and Ches
8. Name the two ways in which poverty can be measured.
9. How is attachment affected by relationships?
10. How is attachment affected by poverty, social exclusion, addiction a
11. What is the difference between temperament and personality?
12. How do Erikson's eight Stages of Psychosocial Development inform development?
13. What five core personality traits have been identified by psychologi
14. 'Self-concept' is an umbrella term for three things; what are they?
15. How does self-concept begin in babies?
16. What affects self-concept, particularly in early childhood, adolescen
17. Charles Cooley's looking-glass theory has three parts; what are they
18. What external factors can have an effect on self-esteem?
19. What are Piaget's stages of moral development?
20. Why do Kohlberg's stages of moral development only start at the ag
21. What are the different stages of moral development according to Ko

A4: Social development across th

The stages of play in infancy and early childho

In the early stages of life, the quality of our interactions with caregivers and the e impact on our social and cognitive development. In many cultures, play and work activities as they are in Western cultures. Childre play, but their play is an imitat the other hand, our culture sees play as separate from real life. An int involved six-year-old children ask pictures of adults and children doing The children's pictures of showed them washing the car, hoovering, etc., w showed the ir things, going to school or kicking a ball around.

It is no coincidence that we talk about children 'learning through play', and many world have developed along those lines, such as the EYFS (Early Years Foundation Froebel and Steiner Schools. Montessori even went as far as to state that 'play is didactic materials deliberately do not encourage social play as this only interferes specially developed resource is available within the classroom, and few are desig

Why play is important:

- Provides sensory stimulation that supports the development of neural pa and memory development
- Provides the foundation blocks for fine and gross motor skills developme
- Provides an avenue for imagination and creativity
- Allows you to engage with something repeatedly, fine-honing skills and e laid before progressing to more complex tasks
- Allows you to be curious, to think 'what i
- Allows you to be inventive, de problem-solving skills
- Allows you to develo ial s ls, including sharing, collaboration, coope needs and feeli others
- Re n ority to communicate, prompting the development of langu skill
- Provides a basis for social interaction and the development of friendship
- Provides a platform on which we can build skills in self-regulation, courte
- Allows children to develop an understanding of rules and how to share
- Allows children to investigate difficult themes. such as death

Play is a social construct, dependent upon the culture children play in. Play is imp children develop the skills and learning habits that they will need throughout thei introducing play to areas that are 'play-deprived' improves children's cognitive, m al., 2002). Play therapy is often used for children who have experienced adversity

There are many different theories and studies that have been made about play. developed her theory that children engage in six different types of play while obse children aged two to five, during the late She defined free play as anythin production or profit'.

These stage rge infancy through to early childhood, and are not neces developme

Mildred Parten's six stages of play

Stage of play	Characteristic
Unoccupied	Children are not playing with anything or watching anyo
Onlooker	Children watch each other play, and may interact social play activity itself.
Solitary	Children play by th[illegible] with no input from others.
Parallel	Ch[illegible] play alongside each other, sometimes copying
Assc[illegible]	Children are playing together but their play is uncoordin play agendas.
Cooperative	Children interact and play together without adult suppo

Once children have achieved the stage of cooperative play, they are beginning to group, for example, a football team. Cooperative play requires a high level of soci skills, and the ability to understand the importance of rules and adhere to them.

Developing these ideas about types of play, Tina Bruce, a social learning theorist who is influenced by the work of Fredrich Froebel (1782–1852), has developed a system of 12 features of play. Each feature can occur at any age. Bruce uses the term 'free-flow play' to explain how children use the experiences they get from social interactions and developing skills to 'wallow in their play'. Th[illegible] concept of free-flow play has been [illegible]ne[illegible] into present educational termin[illegible]ever to children's abili[illegible]to [illegible]ly between areas inside and [illegible] the classroom.

Tina Bruce's Twelve Fea

1. Children use first-h
2. Children make up r keep control.
3. Children symbolical making and adaptin
4. Children choose to to play.
5. Children rehearse t
6. Children sometime
7. Children pretend w
8. Children play with a cooperatively in pai
9. Children have a per may or may not be
10. Children are deeply distract from their in their play and lea
11. Children try out the skills and competen they know.
12. Children coordinate sense of relationshi and cultures.

Many fear that children's play is becoming a rare commodity. Symbolic learning (letters and numbers) is entering the previously play-dominated realm of the preschool and reception class. Children no longer play outdoors, with parents overly worried for their safety. The rise and rise of computer games means many children, adolescents and adults spend hours glued to a screen, interacting with unknown others over an Internet connection in an artificial world. The term 'helicopter-parenting' has gained notoriety as parents, in a bid to help their children avoid the stress of day-to-day living, end up overprotecting and dominating them, filling their fr[illegible]e[illegible] sports, dance or other activiti[illegible]nd not allowing them to take risks su[illegible]mbing trees or cycling to a friend' [illegible] a few minutes away.

Educationally, we have even tried to quantify the types of play that one would see took the view in 2015 that:

'as children grow older, and as their development allows, it is expected that th child-initiated experiences will gradually shift towards more activities led by a for more formal learning, ready for Year 1.'

(OFSTED, Teaching and play in the early years – a balancing act? May 2015, No. 150085)

The following play terminology is often used in relation to preschool and Receptio

- Free-flow play: sustained play where children are free to explore, select and u both indoors and outdoors, as they like without interruption
- Structured play: play that has been organised and planned for by more know initiated and adult-directed play, usually with a pre-agreed learning inte
- Adult-initiated play: play which may or may not be preplanned, but which is b interests and provision of appropriate resources or provocations that childre from an adult and then independently
- Adult-directed play: play which may or may not be preplanned, but which is b interests and provision of appropriate resources or provocations that require involvement from an adult than adult-initiated play
- Child-initiated play: sustained play that has been initiated and continued by t involvement

The importance of social interactions

We are highly social beings, defining ourselves by complex interactions at family, international levels. Platforms such as Facebook or Instagram have grown enorm socialise, and to be part of a group. Aristotle is quoted as saying over 2,000 years an individual who is unsocial naturally and not accidentally and is either beneath either a beast or a god.' Quite why we are so sociable, compared to other animal anthropologists believe it has to do with survival. A family unit is stronger than a is stronger than a single family, all the way up through village and city to nation ar numbers, especially if everyone is in agreement.

Additionally, our brains appear to be hardwired to interact socially. Bowlby, in his positive attachment between babies and caregivers, realised that just caring for a warmth, cleanliness, sleep) was not enough. Babies need to be held, nurtured an earlier, Mary Ainsworth's research in the quality of mother–child relationships un insecure attachment (anxious resistant and anxious avoidant), which affected the mother and the stranger (Strange Situation experiment) and would impact on rel

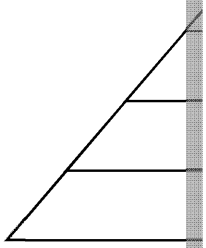
Babies born to depressed mothers are shown to have lower levels of social and em and Brockington, 1997). Research also shows that babies are hardwired to look at resembles a face, and can process faces to an adult level by the age of four month a much lower level in the brain at this age (Faraz et al., 2012). Researchers believe learning about social and emotional cues from facial expressions, and start to imit learning from the reactions and interactions they get from parents and caregivers

So what exactly are the social benefits and importance of frien friendship groups?

Maslow (1908–1970), in his theory on what motivates humans, argued that once basic needs such as food and safety are fulfilled, the next basic need is to feel loved and have a sense of belonging. He recognised the strength of this need, particularly throughout childho and how it can dominate the other levels, such as safe or physiological needs. For example, children and adults will still cling to those closest to them for love and affection even if they suffer abuse from them.

Maslo

Self-actualis



A lack of lov sense of belonging can negatively affect family relationships and friendships later in life. People who do not have a sense feel, to a greater or lesser extent, lonely, anxious, isolated and ostracised. As we where we live or lack of mobility and illness can also reduce that feeling of belong

A feeling of belonging is what drives us to take part in social activities and join pro It is part of the way in which we organise our sense of self-concept and is particul early adulthood, when peer pressure may cause us to join groups that are not be emotional development. Maslow recognised that the hierarchies are interrelated each other, and that they are relevant at all stages of our lives.

Positive effects of social interaction

Belonging to a social group is one of a human being's basic psychological needs ar many different ways. There are many different group set that we can belong political, professional – but the one thing they ha in common is that other mem ideas or characteristics as we do.

Social interaction helps us t

- stay me h motivating us to connect, take part, do better or help
- comm ideas, needs, cultural beliefs and social values
- provide support system, e.g. drug rehabilitation, postnatal, bereavement
- promote a cause or express personal beliefs, whether as a protest or in a pro
- feel positive and happy (research shows that socially engaged adults age bet
- achieve goals such as weight loss or running a marathon

Negative effects of social interaction

Not all social interaction is positive. Intimidation, violence, abuse, bullying and pe throughout our lives, and everywhere we go. The effects can be:

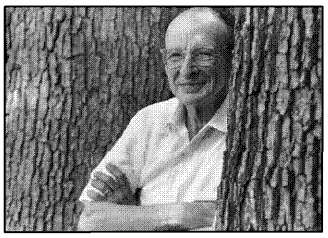
- lowered levels of self-esteem, especially if a person is ostracised from a grou (peer pressure)
- fear – fear of being hurt, fear of being found out, fear of letting other people enough
- anger and aggression – often a defensive rea tio linked to fear
- bullying, intimidation and violence carried out by you on those you can do (children, partners, pets)
- depression – loss of a feeling of belonging, low feelings of self-wort difficu ov or away from the negative behaviour
- powerl s – inability to change the situation, such as move job, or leave
- physical reactions – migraines, stomach cramps
- stress – although stress can have a positive effect, raising concentration level done, it can also have negative effects, such as weight gain, affect sleep patt
- obligation – feeling obliged to join the group so as to be part of something a

We often think of bullying or peer pressure as something that happens at school, groups, but they can also happen in the workplace, at church, or in a family relati patterns of behaviour that often start in childhood or adolescence. At these stage is still fragile and immature, and needs positive interactions to build it up. The beh bullied *will* often change, and this is not just due to hormonal and physiological ch

- becoming secretive and withdrawn, and unable to share what is happening w to them
- becoming irritable, argumentative and aggressive
- becoming less confident, with lower levels of self-esteem
- losing trust, particularly if having confided in someone, that person 'tells' a t
- pretending to be ill in order to avoid seeing the bully
- lying about things
- becoming convinced that it is their fault, and having feelings of self-doubt and gui

People who engage in negative social behaviour and become the bully, may have and emotional interactions while growing up, or are suffering from stress or tired abused by others.

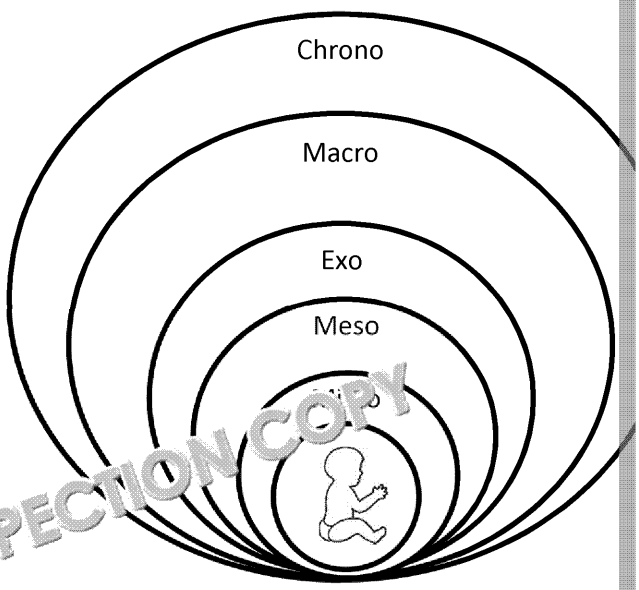
The development of relationships with others



The developmental psychologist **Urie Bronfenbr** in Russia, but moved with his parents to the USA was a co-founder of Head Start, a programme des disadvantaged preschool children in the USA. His the first to consider that child development occu influences, such as education and sociocultural n

There is a vast complexity to human relationships. Relationships develop through teachers, friends, work colleagues etc. In 1979, Urie Bronfenbrenner published h which he sought to explain how the different social systems we encounter affect systems both influence, and are influenced by, the child.

Diagram of Bronfenbrenner's Ecological Systems theory



Each circle represents a different layer that will influence how relationships deve

Micro: This layer is closest to the child. Within it are the environments with contact, e.g. family and home. The child can influence this layer thro personality traits, and the family and home structure can influence th cultural beliefs.

Meso: This next layer contains environments and structures which are still v effect. They include any kind of nurs[illegible] school environment, heal doctor, neighbours and friends. At this level, the child is an active pa come into cont[illegible]th such as school. The child is also influenced b with oth[illegible] this layer. A positive relationship between school and child's development than a negative one.

Exo: Within this layer are environments that do not affect the child direct felt. This could be a parent's workplace, and how their working sche affect the family. It could also refer to decisions taken by local counc institutions, etc. that indirectly affect their lives. TV and other media example would be a council decision to build 200 new homes on the

Macro: This layer refers to environments and structures over which the child could refer to the customs of the country or particular ethnic group, society, central government decisions about schools and healthcare, crises and conflicts that some children in minority culture families fac dominant culture of the new country.

Chrono: Chrono refers to time, and this layer is about the history behind the s make up the society the child is born into. What effect do war, trade the lifestyles of the child and their family and the way the society the

How do relationships develop?

A relationship is a two-way [illegible] between two people, during which one or bot Relationships between people, or between people and groups, develop over time maturity, temperament, traits and self-concept. Some relationships will involve p such as close family or friends, others will be acquaintances and yet others will be lives. Relationships can change across social boundaries, for example, if your boss have a different relationship with them out of work compared to in work.

Relationships are based on trust, respect, understanding and some kind of similarity or perceived similarity, between people. A person who dislikes running will never enjoy playing on a football team, for example.

So
-
-
-
-
-
-
-

We often compartmentalise relationships under different headings, such as best friend, manager, family, and each relationship will be treated differently with regard to the importance we attach to it. Some relationships will be built on solid foundations and have a certain degree of consistency and reliability, while others will be less stable.

On a social level, we build up new relationships through stages:

1. Pre-relationship: learning that another person or group exists
2. First steps: meeting them for the first time, making quick judgements, learning the basics. At this stage you may decide they are not your type and the relationship will
3. Second steps: follow-up meeting(s) with them, getting a better understandin they are, and deciding whether the relationship will be close, or more an acq relationships go beyond this stage.
4. Getting closer, sharing thoughts, dreams and secrets
5. Strengthening the relationship, devoting time and energy to it, perhaps marr

The idea that all relationships are based on the concept of give and take led to the development in the early 1960s of Social Exchange theory. Social Exchange theory is actually not a true theory but a framework for several theories. It states that people only engage in relationships because they want to get something out of them for themselves. According to the theory, everything that is done in a relationship is driven by ideas of:

- Is it to my advantage?
- Do I deserve it?
- Can I get something better elsewhere?

Soci
Wor

Rewards are the
such as nurture, a
Costs are the neg
money and emoti

Worth is the final
rewards and costs
is positive then th
it is negative the

If our actions have been positively and receive approval, we are more likely to repea
be that we deserve to receive approval for other actions. If our expectations are
finding another relationship. Cultural norms play a strong part in Social Exchange
many different ways, from a simple smile to a special gift.

Detractors of Social Exchange theory argue that it does not take into account the
particularly with regard to personal relationships. Also, it views a relationship as
individuals, and does not consider so-called 'group mentality', where a person wil
good of the group even though the Worth outcome is negative.

Within successful relationships, partners are tuned in to the needs and interests of each other. In order to understand the feelings of others we need to be able to mentally represent and understand the state of mind of others. Infants and children up to the age of around four years old are incapable of inferring accurately what others are thinking. They interpret everything from their own viewpoint and belief.

Theory
mentall
from be
what ot

The 'false belief' test for Theory of Mind

A box is filled with something that would not usually be there, e.g. a Smarties tube is filled with pencils. Three questions are then asked:

1. What do you think is in the box? (before opening it)
2. What did you think was in the box before you opened it?
3. What do you think your friend will think is in the box?

A **three**-year-old will answer 'Smarties' and be surprised that it is pencils, but will then answer 'pencils' to questions 2 and 3. A **four**-year-old will answer 'Smarties' to all three questions.

Have a look at this video on YouTube:
zzed.uk/7993

Develop
foundati
and und
same wa
languag
biologic
Mind. N
as child
stimulat
talk abo
and feel
children
surprise
someon
'Little Re
cement

The ability to understand others appears to be a particularly human trait (research primates such as chimpanzees and apes also have a Theory of Mind, although som us to build, maintain and manage complex relationships. It also provides us with codes and rules of behaviour that ensure stability and social cohesion. Theory of empathy and put ourselves in someone else's situation, or sympathy, acknowledg another person might be facing. People born with Autistic Spectrum Disorder (AS Mind, and need assistance in developing social skills.

The development of independence through the

Referring back to Bronfenbrenner's Ecological Systems Theory, we can see there a
our growth and development throughout the life stages. Also, that there is a reci
we have with other people, groups and institutions, in other words, they influenc
our lives develop will be dependent on some things that are out of our control, fo
type of education we receive, and others that are within our control, for example,
or the hobbies we like to do.

The development of independence:

Infancy:	...ication needs and wants, undressing, learning to
Early chi...	going to playgroup and school, having school friends, wal... house alone
Adolescence:	going to secondary school and/or sixth-form college, havi... to drive (car or motorbike) and romantic relationships
Early adulthood:	leaving home, going to university, working full-time, getti...
Middle adulthood:	children leave home, more time for hobbies, interests an...
Late adulthood:	take part in social groups and hobbies, loss of independe... medical needs

The choices we make as we become more independent are influenced by the cult...
such as marriage or having children, might be considered as 'traditional' choices;
more unusual. Some choices may be influenced by social m...ia or advertising. S...
labelled by social commentators, e.g. 'millenials', 'bab...mers', because they te...
characteristics. Social research suggests tha...nials' (children born between t...
self-obsessed, and value personal m...al ...arth more than previous generation...
more involved in volunteeri...revious generations and have more liberal sc...

As we beco...re independent, we take on the roles and responsibilities of our...
children, mo...ge, etc.). These roles and responsibilities will change from gener...
and cultural changes, particularly as 'traditional' values alter or become less valid.
society are continually affected by the effects of globalisation, immigration and m...
secular changes and the fragmentation of our society as families no longer live on...
same town, as other relatives.

A4 Revision questions

1. Give as many reasons as you can think of for why play is important.
2. What are Mildred Parten's six stages of play?
3. What do the following terms referring to play mean: free-flow play, s play, adult-led play, adult-directed play an d initiated play?
4. Draw and label a picture of M s ow s Hierarchy of Needs.
5. What are the s l ben fits of having a friendship group?
6. What c the negative results of social interaction?
7. Name Bronfenbrenner's different circles of influence in his Ecologic part of society each circle represents.
8. What is the equation for Social Exchange theory?
9. Explain Theory of Mind.
10. Provide one example of how we gain independence for each life sta

B1: The nature/nurture de

Key Terms

Nature	Development shaped by inherited predispositions; also know
Nurture	Development shaped by appropriate educational environments and

What makes us the person we are has been the subject of conjecture and debate present-day development theories lie in the work of the seventeenth- and eighte Locke (1632–1704) and Jean-Jacques Rousseau (1712–1778).

Prior to this time, society generally viewed children as immature or miniature adu *Childhood*). Also, the Christian doctrine of original sin meant that sociocultural be born with a tendency for evil, and it was, therefore, the moral responsibility of al tendency through the use of discipline and punishment.

Locke refuted this philosophy of original sin, and proposed that children are blank knowledge *only* develops as a result of interaction with people and the environm everyone is born with different temperaments and mental capabilities, which affe knowledge to previously acquired knowledge (Piaget's late idea of association). acquired through *nurture*.

Rousseau, however, saw children as 'noble savages' shaped by nature and interna children were born inherently innocent and good, with the ability to understand to write about childhood as a separate stage of life, and believed that developme not just physical growth.

Charles Darwin's (1809–1882) seminal work *On the Origin of Species*, published in detailed observations of his own son. His view that in order to understand the na should study our children, was taken further by the psychologist Charles Hall (184 Study Movement. This coincided with major social changes and reforms taking pl health, welfare and education of children and families.

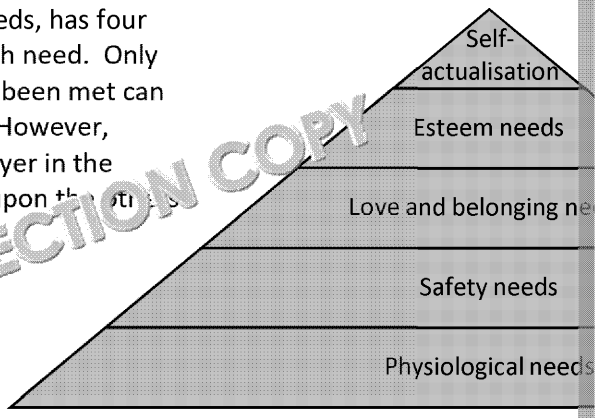
Psychologists continue to disagree about the split between nature and nurture, a rests on inherited traits and predispositions, or supportive environments and rela light of modern research the debate is now archaic and out of time, since we kno genome and how different genes are linked to certain physiological and possibly p for example, from the Romanian orphanages of the 1980s showed that social and physical development are inhibited if babies do not receive appropriate responses This suggests that if we are born with innate neurological structures these can only de environmental influences. It is not enough just to be born and survive.

Both Locke and Rousseau saw the child as entirely passive in nature, open to wha but later theorists such as Piaget, Vygotsky and Bruner saw the child as active in n learning. Learning was constructed either as a result of maturation (Piaget) or so

What do we mean by the term 'environmental factors' in human growth and deve

In Chapter 1, we considered how Maslow's Hierarchy of Needs supported theorie
belonging in the development of safe and secure relationships and social interacti
headings on which to hang the complexities of the needs that drive and motivate

Maslow's basic Hierarchy of Needs, has four deficiency needs and one growth need. Only once the deficiency needs have been met can we address our growth needs. However, Maslow considered that each layer in the hierarchy was interdependent upon th ti s and all were equally importan



Layer	Positives for growth and development	Negatives
Physiological	Nutritious food Ability to keep warm or cool Safe and comfortable shelter Clean drinking water Good sanitation	Lack of foo Unable to k Unsafe drin Unsafe or n Poor sanita Poor health
Safety	Good economic circumstances Tolerance Inclusion Personal and familial security Respect of others and property Care of others within fr s rk society	Poverty War, perse Family brea Abuse, neg Lack of resp Violence an
Love an belongin	Family support Friendl o Se e achments lf-worth Dignity Confidence Love and intimacy	Low self-es Bullying Fear and in Lack of sup Depression Isolation an
Esteem	High feelings of self-worth and self-esteem Dignity Education Confidence	Low feelin Poor self-in Loss of skill Feeling und Mental hea
Self-actualisation	High morals Creative Open-mindedness Tolerance and acceptance	Immorality Destructive Bullying an Hatred and

The physiological layer refers to environm in uences that affect us physically food, water, warmth and clothin . c e no longer struggle to achieve these p concentrate more on th e l ayer, safety. Failure to achieve them results in a malnutritio r h isolation or ostracism from society.

The safety la fers to our personal feelings about security. We may well feel u meeting our basic physiological needs, but once these are satisfied we will turn to environment for ourselves and immediate family. Factors that would be included housing, law and order, rules and regulations, employment, health and general so effects of war, social unrest and persecution may also impact on basic physiologic clothing and shelter.

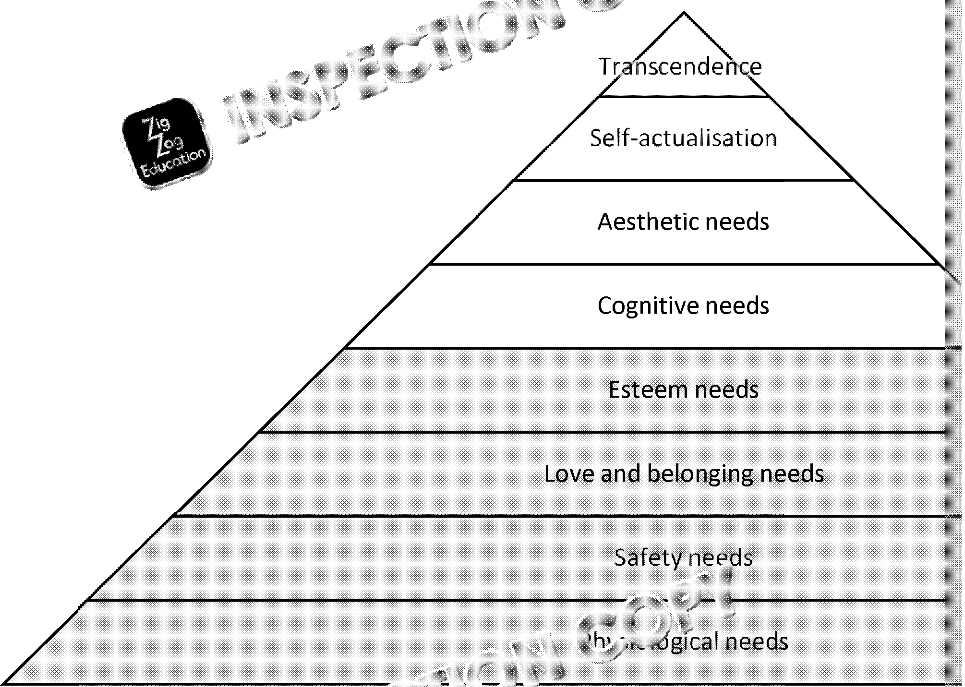
Love and belonging can only occur once we feel safe and secure, although, as disc
children and adults who do not feel safe and secure in a relationship or situation r
physiological and safety needs are not being met, and will stay in the relationship
change, or because they feel they have no choice but to remain. Our need for lov
satisfied through the development of caring relationships with family and friends,
and feeling part of society. Loss or lack of a feeling of love and belonging can affe
lead to a feeling of isolation and cause mental health or dependency issues, leadi
holding down a job, lowered self-esteem and difficulties in relationships.

Once we are secure in our physiological, safety and belonging needs, we can conc
aspect of our needs, our esteem. Maslow defines esteem as something that com
about who you are, what your place is in society and how successful you feel with
Pride in one's achievements and recognition from others support feelings of
self-esteem is linked to many negative behaviours, social outcomes and ill health.

Once all four deficiency needs have been met, we can concentrate on the growth
when we turn our attention to realising our own potential. At each level, Maslow
certain level of acceptance or ability, otherwise we will be compromised at the ne
starving you will not be concentrating on finding a safe place to live, or a loving re
your first priority.

Later psychologists and researchers added three more layers to the growth part o
referred to as Maslow's Motivation Model, it includes cognitive needs (learning, e
aesthetic needs (the need for creativity and beauty); and after self-actualisation, t
society by helping others achieve their full potential).

Maslow's Motivation Model



Although Maslow's Hierarchy of Needs is firmly based in nurture, and how the en
development, it does not take into account how we personally choose to deal wit
For example, do we run away from a confrontation about the last slice of bread a
sharing, or maybe grab it all for ourselves?

Arnold Gesell's Maturational Theory of Child

Arnold Gesell (1880–1961) was an American developmental psychologist w
the Maturational Theory of Child Development. He believed that both nature
were equally important in a child's development. Gesell saw development oc
cyclical spiral, moving from equilibrium to disequilibrium.

He was one of the first child development psychologists to use video recordi
way mirrors to record observations of children in his research, and was drive
to provide appropriate learning environments for all children, including gifte
and those with delayed development. His work is continued by the Gesell Ins
USA.

Gesell was in direct opposition to learning theory because he felt it did not take in
affect how learning is assimilated and accommodated. He argued that the learnin
modify development but it cannot change growth or maturation.

According to Gesell's Maturational Theory of Development, physiological and behavioural development occur in a fixed sequence (which is not age specific), starting within the womb and continuing throughout early childhood and adolescence. Development is driven by both maturational and genetic traits and is faster in early childhood than in adolescence. Each cycle of the spiral has a high point, equilibrium, and a low point, disequilibrium.

**What does Ge
'equilibrium'**

Equilibrium
Calm
Consolidating use known skills
At a stage or plat of developmen
In harmony with environment and
Stability
Confident
Pleasant to be w

Within each cycle are six stages:

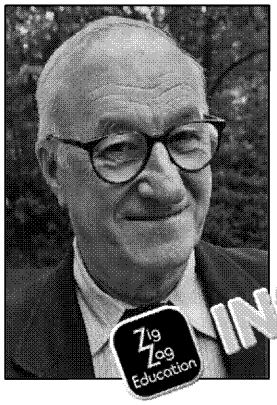
- equilibrium or smooth
- disequilibrium or break-u
- sorting out
- inward
- expansi
- neurotic 'fitting together'

Children from birth to six years old will go through this cycle approximately every six months. This will change to an annual cycle betwee become longer still as we reach maturity.

Gesell's work is based on thousands of detailed observations of children of all age and covers physical development, adaptive (cognitive) development, language de social development. He believed that every child was unique, and possessed inna inherited through biological selection over many generations, that drove physical personality, behaviour and cognitive ability. Gesell acknowledged that children d social and cultural environment, but this is limited by a predetermined structures present in the child's brain. Research has shown that certain physical d milestones (pointing, grasping and crawling) are consistent across different social suggesting that these milestones have a genetic foundation possibly linked to brai of neural pathways to aid the memory.

Another asp Gesell's research was the idea that innate knowledge about pe hardwired into the brain from birth. This would explain why newborn infants trac how we seemingly acquire language effortlessly (Noam Chomsky's Language Acqu interaction with the environment, led by genetically inherited temperament and p details for the innate structures.

Albert Bandura's Social Learning theory



Albert Bandura (1925–) is an American psychologi
Learning theory. In the theory he states that we lea
others do, than from rewards and punishments (be
structures (nativist model).

Bandura's theories and research in the 1960s led him t
Bobo experiments series of experiments where chil
different scenarios in a play area involving a doll called
was aggressive with the doll, shouting and hitting it, in
with normally, and in the third the doll was completely
were left by themselves in the play area, those who ha
aggressive to the doll also acted aggressively to it.

Bandura therefore concluded that we learn through observation and imitation rat
and punishments, or pure maturation, as the children had received no incentive t
the doll, but had just copied what they had seen the adult doing.

Bandura's work builds on that of Vygotsky, who believed we learn within a social context provided by more knowledgeable adults. Bandura, however, believed that behaviour (both of the child and the adult) affects learning within the environment. This relates to the enactive and iconic Modes of Thinking proposed by Jerome Bruner, whereby we learn by doing something (enactive) and then create a mental image of what we should be doing (iconic). As we mature (around seven years old) we can abstract that thought to situations that we have not personally experienced, such as stroking a sheep.

The four stages o
1. Attention: Ch
a child.
2. Retention: Ch
accommodat
3. Motor reprod
a child.
4. Motivation: If
successful, ad

Generally, it is agreed that growth and development are influenced by all of the a
degrees. Maturation, genes, innate biological systems, environments and social in
shaping who and what we become.

In health and social care, it is important to understand the interaction between the different stressors that can affect an individual at different stages in their lives. The stress–diathesis model is a tool that attempts to quantify the relationship between stressors and predispositions, vulnerability and resilience.

The **stre**
how a g
predispo
be trigg
(persona
biologic
resilienc
network
illnesses

The term 'diathesis' refers to inherited genetic or biological susceptibility and predisposition to develop a particular disease, disorder, allergy or mental health condition (nature). It means we are all vulnerable to developing these diseases, allergies or conditions but this may not happen if we are resilient to stressors.

Stress in the stress–diathesis model refers to the different stressors or traumatic e
lives. This could be anything, for example, problems in personal relationships, lea
pressure or abuse (nurture). How our minds and bodies cope or do not cope w
biological changes or cell mutations that will cause the onset of certain diseases a
stressor we encounter, and our reactions to them, change as we mature and we b
on new coping mechanisms. Also, protective factors, such as a solid social networ
traumatic events, improve resilience and reduce the biological and mental effect

B1 Revision questions

1. What is the difference between nature and nurture?
2. What do we mean by 'tabula rasa'?
3. What are the four deficiency levels in Maslow's Hierarchy of Needs?
4. How does each level in Maslow's Hierarchy of Needs have a positive and development?
5. What does Maslow mean by 'self-actualisation'?
6. In Maslow's Motivation Model, what skills or areas do the terms 'cog needs' and 'transcendence' cover?
7. What is Gesell's Maturational Theory of Development?
8. Who developed the ideas behind Social Learning theory, and how w
9. What are Bandura's four stages of observational learning?
10. What is the stress–diathesis model?

B2: Genetic factors that affect de

Every cell in our body contains 23 pairs of chromosomes, and each pair is compos
Genes are composed of deoxyribonucleic acid, or DNA. Each gene contains a uniq
parents, which provides the specific genetic characteristics that pass down the ge
specific task; for example, to create muscle fibres, or deci e colour of our eye

At conception, a child will inherit an equ er of 23 chromosomes from each parent, which together. Each chromosome will contain genes from the parents, which is what make de (apart from identical twins). Within the genes s ll be dominant and some recessive, which will affect development. This information can be used to work out the probability of a child inheriting certain traits or conditions using Punnett squares.

A **chrom**
structure

A **gene** is
carries th
providing

Punnett squares

Punnett squares were created by an English geneticist, Reginald Punnett. The
the probability of children inheriting certain traits from their parents; for exa
such as cystic fibrosis, the Punnett squares could be as below:

Example 1

If both parents have one dominant gene (A) and one re sive gene (a): there
children having cystic fibrosis (aa), a 25% chan e will not carry the recess
chance their child will be a carrier of the e gene (Aa).

Parent B \ Parent A	A	a
A	AA	Aa
a	Aa	aa

Example 2

If one parent has the disease: there is a 50% chance that their children will eit
or carry the disease (Aa).

Parent B \ Parent A	A	a
a	Aa	aa
a	Aa	aa

Children ca it recessive genes from one or both parents and be born with a
fibrosis. Sor es the chromosomes themselves are changed or missing, as in th
children are born with a full or partial extra copy of chromosome 21 in every cell.
affecting how a cell functions. Mutations, which may arise due to lifestyle choices,
or colon cancer. Most people have no idea that they are carriers for certain geneti
gene that predisposes them to certain diseases such as cancer or cardiovascular di

The term 'congenital defect' is used to describe all forms of physical or metabolic child. They may be discovered while the child is still in the womb, e.g. tests for Do spina bifida, or they may only be discovered once the child is born, or later as the milestones. The anomaly can be caused by a variety of factors, such as genetic de disease, exposure to chemicals or drugs, poor nutrition, consanguinity or age of th known or identifiable cause. Some physical defects, such as a cleft palate or heart through surgery; others require medication and/or suppo[illegible] the child and their their lives.

There are many different defects and [illegible]alities that may affect the unborn child growth and development [illegible]birth. Some are life-limiting, some create severe c the child an[illegible] fa[illegible] they negotiate their way through battling the conditi support is a[illegible] with regard to health, education, respite care, etc.

Below are some types of congenital defects, listed according to the predominant f genetic, chromosomal, gene mutation, mitochondrial, glandular, biological and en

Note: Conditions marked in grey are additional to those mentioned in the specifi

Genetic Predispositions to particular conditio

Some single genetic conditions. These occur when the child inherits the recessive

Genetic condition	Health and development indications
Colour blindness Mutation of lack of cone cells in the eye. We have three types of cone cell, each registering either green, red or blue light.	Inability to differentiate between colours or shades of colou[illegible]rticularly red and green. Thi[illegible]use problems with le[illegible]to read or learning to drive.
Cystic fibrosis Presents with diffe[illegible]ls of severity. [illegible]by a defect in the 'cystic fibr[illegible]ansmembrane conductance regulator' gene which controls the movement of water and salt in and out of cells, causing a build-up of thick and sticky mucus in different organs, e.g. lungs and pancreas.	Life-limiting (up to around 40 years of age) and progressive disease. Build-up of mucus in the lungs, pancreas and intestine affects breathing and digestion. Sufferers are prone to respiratory diseases, and have difficulty digesting food.
Duchenne muscular dystrophy Caused by the absence of the protein dystrophin that keeps muscle cells intact. Starts in early childhood. Primarily affects boys.	Life-limiting. Deterioration in muscle tone including heart and diaphragm, which affects breathing. Learning difficulties.
Haemophilia Inability c[illegible]'oc[illegible]to clot. Affects onl[illegible].	[illegible]nc[illegible]olled bleeds can cause damage to joints, brain damage or organ failure. Infections received through blood transfusions. Haemophiliacs should not take part in contact sports. Can affect self-esteem, particularly in adolescence.

Genetic condition	Health and development Indications	Treatment
Huntington's disease A progressive brain disorder that usually develops in people aged 30–50, but can develop any time between the ages of two and 80 years.	Life-limiting. Causes involuntary movements of the arms, legs, head, face and upper body. Affects memory, concentration, reasoning, judgement and ability to plan. Changes within the brain cause mood swings, depression, volatility and obsessive compulsive behaviour.	No cu centre such a langua therap help w
Osteoporosis (brittle bone disease) Deterioration in bone density tha causes bones to brea ily	Often occurs in women after menopause, but may also affect children (o eogenesis imperfecta or osteo sis pseudoglioma syndrome) h is ve. May also present as a s l ating disorders, and due to ng long-term medication, such as corticosteroids for polymyalgia. Susceptibility to bone fractures in spine, wrist and hip areas. Spinal fractures may cause stooping in older people as the spine no longer supports the body effectively.	Treatm medic bones impro postur to less falls.
Phenylketonuria (PKU) Inability to metabolise the amino acid phenylalanine. Can lead to brain damage and seizures. Babies born with PKU may have heart problems, and low birth weight.	Babies born with PKU are healthy at birth. All babies are screened through blood tests for PKU. If treatment starts immediately and is followed people with PKU can lead normal lives.	No cu Some may b
Sickle cell anaemia Genetic mutation that prevents the production of haemoglobin, used to transport oxygen in the blood cells. Red blood cells die after only 10–12 days (usually live for 120 days), causing severe anaemia.	Anaemia (low levels of oxygen in the blood). Swelling of hands and feet due to circulation problems. Chest and vision problems due to blockages in e small blood vessels that s th e organs. Fatigue. O duc on of bilirubin, which bre d blood cells, leading to the tion of gall stones	Medic sympt transp damag where produ place – findi is diffi
Tay-Sachs disease Lack of a specific enzyme that causes fat build-up in the brain, destroying cells	Muscle weakness and contractions. Loss of vision. Swelling of the brain	Life-li betwe years Medic sympt

Chromosomal disorders occur when the number of chromosomes within the cells added to. Many foetuses conceived with a chromosomal disorder do not make it aborted by the body. The most common chromosome disorder is Down's syndro

Chromosomal condition	Health and development indications
Down's syndrome Caused by the presence of an extra chromosome (number 21)	Children with Down's syndrome will have particular facial features. Many will have poor muscle tone, heart and [illegible] problems and learning difficulties.
Klenfelter syndrome Boys are born with an extra X chromosome.	Infertility. Abnormal body proportions (short body and long legs). Sometimes have learning difficulties. Predisposition to breast cancer and autoimmune diseases.
Turner syndrome Quite rare. Only affects girls. Girls are missing or only partly have the X chromosome. They will have a low hairline at the back of the head, a short, webbed neck, low-set ears, short stature and swollen hands and feet.	Unable to have children. More susceptible to heart problems, low thyroid and diabetes.

There are many different conditions attached to gene mutations, some of which h health or life expectancy. Additionally, scientists now believe that gene mutation environmental factors) may cause cancers, cardiovascular disease and Type 2 diab

Gene mutation condition	Health and development indications
Achondroplasia Caused by a genetic mutation in a protein responsible for converting cartilage to bone	Disproportionately short arms, fingers and legs. Large head and specific facial features. Weak muscle tone. May cause medical problems such as back pain and breathing problems. The condition does not affect brain development.
Behçets disease A type of autoimmune disease caused by a genetic mutation that causes inflammation of the blood vessels – prevalent in certain communities in the Far and Middle East.	Ulcers. Eye inflammation. Sensitive skin. Predisposition to stiff and swollen joints, blood clots and aneurisms. If diagnosed early, medication can alleviate symptoms.
Cancer Abnormal cell growth that forms tumours, which can spread to other parts of the body.	Depending on the cancer and age of the patient. In older patients, cancers tend to develop more slowly than in younger patients. Cancer can affect every organ in the body and red blood cell production. Causes weakness, tiredness and pain, depending on where the cancer is situated. Treatment can lead to hair loss and tiredness, affecting ability to work, take care of the family, etc.

Mitochondrial myopathies or diseases are caused by mutations in the mitochondr
Mitochondria are present in every cell in the body and act as power plants conver
Different myopathies are connected to damage to different parts of the mitochon
can only be passed on by a mother. A woman can carry defective mitochondria w
and pass these on to her children. Due to the complexity and variation of mutatic
of varying severity, affect only one organ or several, and may develop later on in l
adolescence), rather than be visible at birth.

In 2015, an amendment to the 2008 Hum[illegible]tilisation and Embryology Act was
the use of the genetic material fr[illegible]people (father, mother and another wo
mother is known to have defective mitochondria. The genetic material from the t
mutated ge[illegible]th [illegible]ised embryo before it is implanted in the mother. How
unaware th[illegible]are carriers of the mutated genes.

Some conditions caused by mitochondrial genetic mutations, for which there is nc

Syndrome	Health and development indicators	
Kearns–Sayre syndrome (KSS)	Vision problems, heart defects and involuntary muscle movements (ataxia). May also cause learning difficulties, and short stature. Onset around the early 20s.	Sup sym
Leber's Hereditary Optic Neuropathy	Causes blindness in adolescence or early adulthood.	Sup
Leigh syndrome and maternally inherited Leigh syndrome (MILS)	Brain abnormalities, sei[illegible]ures, muscle weakness and d[illegible]pr[illegible]ental delay.	Sym spec limi
Mitochondrial DNA depleti[illegible] syndrome (MDS)	[illegible]sc[illegible]eakness and 'floppiness'. [illegible]eeding difficulties, liver failure and developmental delay. Starts in infancy.	Life- seve may Live
Pearson syndrome	Severe anaemia, pancreas, liver and kidney malfunction. Starts in infancy.	Can Life- they

Scientists do not yet fully understand how some conditions and diseases develop
to either genetic, biological or environmental causes. For example, Parkinson's di
production of dopamine and causes nerves to perform abnormally, causing tremo
the body, is one such condition, and allergies such as asthma or Crohn's disease a

Lifestyle factors or exposure to chemicals can affect certain genes, causing them t
work. This is particularly true for some cancers, such as lung cancer or colon canc
responsible for reducing or fighting tumours are either destroyed or switched off
exposure to certain chemicals, such as nicotine. Rese[illegible]hows that some peopl
(substances responsible for triggering cancer) [illegible]e effectively than other p
available for women whose families [illegible] predisposition to breast cancer a
take preventative action whil[illegible] still healthy.

There may [illegible]a [illegible]netic link to other diseases which is not solely based on life
Certain peo[illegible]e a susceptibility to put on weight or have a low metabolic rate
thus, have a genetic background that predisposes them to develop cardiovascular

Conditions related to glandular malfunction:

Name of condition	Health and development indicators
Addison's disease Failure of the adrenal gland.	Tiredness. Inability to cope with stressful situations or trauma (e.g. birth, loss of blood). Osteoporosis (side effect of medication).
Cushing's syndrome Caused by a tumour on the pituitary gland resulting in high levels of cortisol in the blood.	Weight gain around the torso, but weight loss from arms and legs. Easily bruised.
Diabetes Failure of the body to produce insulin responsible for processing sugar, etc. into energy in the body's cells. This is not the same as Type 2 diabetes.	Excessive thirst and weight loss. Blindness, poor circulation in feet and legs (may lead to amputation), kidney and heart failure.
Hyperthyroidism Overproduction by the thyroid gland.	Too much calcium in the blood as it has not been absorbed by the body to support bone mass and development, causing osteoporosis.
Hypothyroidism Underproduction by the thyroid gland.	Weight gain. Eye problems. Low metabolism. Chronic tiredness.

Growth and development may also be affected by biological factors, which will affe
Biological factors can be caused by the mother's lifestyle choices, or poor access to
safe place to live, which expose her to greater risk of infection, disease or stress an

Some biological factors that can affect growth a and impact on health outcomes

Name of condition	Caused by	Health and developme indicators
Cerebral palsy	Multiple causes, including: oxygen starvation during birth; difficult or premature birth; twins or multiple births; infection during pregnancy and low birth weight.	Affects coordination an muscle tone, often causing a person to ma unintended movement or have rigid muscles. Some individuals may have learning difficultie
Chicken pox	Infection.	Learning difficulties and limb deformities if contracted during the first trimester.
Foetal Alcohol syndrome	Excessive intake of alcohol during pregnancy.	Affects brain and organ development. Babies born with characteristic facial features, developmental delay an learning disabilities.
Malnutrition	Lack of a nutritious diet either before or during pregnancy.	Low birth weight or premature birth. Susceptibility to bacteri and viral infections.
Neonatal Abstinence syndrome	Intake of and addiction to drugs during pregnancy.	Dependent upon severi of exposure, may affect social and emotional, cognitive and motor development.
Rubella (German measles)	Infection.	Deafness, eye problems heart defects and possible learning difficulties.
Zika virus (from the bite of mosquitoes in certain countries, such as Brazil)	Infection.	Microcephaly (baby is born with a small head and small brain). Developmental delay, hearing, sight and feedi problems. May be life-limiting depending on severity.

B2 Revision questions

1. What is the difference between a chromosome and a gene?
2. Create a Punnett square to show the birth outcomes for two parents v
   double recessive genotype and the other is a carrier
3. What does the term 'congenital defect' mean?
4. What factors can cause congenital defects?
5. What is the difference between a genetic disorder and a genetic mu
   examp
6. What causes Down's syndrome?
7. What are mitochondria, and what are some of the diseases associate
8. What are Addison's disease and diabetes caused by?
9. What biological factors can affect a baby in the womb?

B3: Environmental factors affect growth and develop

Many factors within the environment can affect growth and development, both pre- and postnatal. These factors can occur anywhere, and affect all sectors of society, although it is more often families on lower incomes that are affected by them. Environmental factors can cause illness, temporary or chronic disability and depression, which can lead to missed schooling, time off work or job loss. Individuals who miss too much school may struggle to pass exams, which limits job prospects later and choice of where to live. This may lead to issues with self-esteem, struggles with poverty or other problems, leading to social isolation and alienation.

Envi
grow
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•
•

Pollution

There are many different types of pollution and they can all have a greater or less growth. Pollution causes allergy, illness and disability, affecting the air we breath effects of pollution on health can lead to premature death, poor school attendanc remain in a particular house or area, displacing families and communities.

Airborne pollution: This affects many cities around the world and is often seen as smog, or a layer of dirty air that settles over an area. Smog can be particularly prevalent in the winter when cold air pushes downwards and prevents the escape of exhaust fumes, smoke from wood or coal fires, etc. (known as inversion). The smog layer will be full of particulates, which are mi or chemicals such as arsenic, mercury or nitrogen oxides. Particulates are so sma body's normal defence mechanisms and embed themselves deep within organs a unable to sneeze or cough them out as they are so small.

Scientists link rise in allergies, asthma, other respiratory diseases and cardiova airborne pollution levels. The particulates do not remain only in the lungs, but are vessels to other organs, causing inflammation and damage along the way. Our bo bodies by producing an allergic reaction, such as coughing, skin rash, running nose worst case, anaphylactic shock, which can be fatal.

Families where parents smoke are more likely to suffer from allergies and respirat asthma, a chronic disease that causes airways to constrict and can be fatal, is incr sudden, frightening and debilitating, requiring hospitalisation, and dependency or Children suffering from asthma may miss a lot of school and find it difficult to catc be off work for so long they lose their job. The medication used to treat asthma o have side effects such as drowsiness and stunted physical growth in children and

Water pollution: In the Western world clean drinking water is considered normal, not the case in many other parts of the world. However, even in developed count become polluted due to poor farming practices, industrial pollution of waterways, breakdown in sewage treatment facilities, or building on contaminated land. Wat such as cholera, typhoid, giardia (caused by a parasite), hepatitis A and dysentery cause of fatalities throughout the world, according to the World Health Organisatio which may be made worse by the difficulty some families may face in accessing m pollution is caused by a natural disaster or war. Babies, young children, those suf conditions and the elderly can be badly affected by the effects of drinking contam hospitalisation and long-term medication. If the body becomes weakened by prol diarrhoea, it is more likely to contract other infections, some of which may be fata

Soil pollution: Often this is linked to water pollution as contaminants leach throug levels and end up in the water table. If water is not sufficiently filtered and cleane before being used as drinking water or for food preparation, then people will be affected. Soil pollution affects how crops grow. They may appear to grow perfect but the contaminants will be taken up into the plants, which are then consumed b people. Exposure to heavy metals such as lead and mercury can lead to liver or ki damage in children and adults, or cause congenital birth d[illegible]ts. Alternatively, cr may fail, affecting the income of the family, leadi[illegible] st[illegible]ss, poverty and unwant changes in lifestyle if the farm is no long[illegible]e.

Noise pollution: Exposure to unwanted levels trying to relax or sleep, can trigger high cortiso children and adults. High levels of cortisol in b attachment bonds to parents and caregivers. affect health, and may cause headaches, anxie affect the immune system. Noise pollution ma According to research, infants and children gro periods of non-REM (Rapid Eye Movement) de hormones are secreted. Studies have also sho deprivation are prone to becoming obese, pos secretion or metabolism.

Lack of sleep can impact on our concentration levels at school or work, affecting l decision-making. People who are chronically stressed often find it difficult to focu leading to stress within the family, and inappropriate parenting. Adults who are p may find it more difficult to provide an appropriate emotional response to their c job, or learn a new skill.

Physically, high noise levels can perma[illegible]nt[illegible]mage the inner ear, causing heari caused by work-related noise [illegible]e.g. exa[illegible]ple, on a building site, or through listening headphones for long [illegible]. Deafness is a disability that affects communication, opportuniti[illegible]

Light pollution: Artificial light pollution is an increasing problem as it affects the circadian rhythm (our natural biological rhythms of sleeping and waking) in both a and humans. Scientists have found that the blue light emitted by mobile phones, clocks and certain types of light bulbs, can negatively affect our production of mel Melatonin is a hormone produced by the pineal gland, located in the brain. Produ is triggered by darkness and causes us to feel sleepy, while natural light inhibits production, and melatonin levels in the body are hardly noticeable during the day Disrupting the circadian rhythm can stress the body, making us tired and irritable possibly triggering autoimmune disorders or even gene mutations.

In the winter, some people suffer from SAD (Seasonal Affective Disorder) triggered This is a particular problem in countries where the sun m[illegible]t be seen for severa but may also affect people in the UK. People suff[illegible]m[illegible]f[illegible]m SAD often feel depres prone to illness. Light therapy, using lam[illegible]ch recreate natural light, helps alle immune system.

Substandard living conditions

Substandard housing, temporary housing and homelessness affect individuals and families in multiple ways. Although there appears to be no 'standard' for what constitutes substandard housing, the Department for Work and Pensions (DWP) in the UK defines acceptable conditions as 'homes that are warm and weatherproof with reasonably modern facilities'.

Poor hous
- healt
- self-e
- educa
- pover

Houses which are substandard are cold and damp. This is an ideal environm and the proliferation of dust mites, both of which can trigger allergies, respiratory and adolesc... There may also be a further link between mould and cardiovasc health is affected may miss a lot of school due to illness or find it difficult to do ho cognitive development, and limiting job choices later on in life. Cold, damp condi breeding ground for cockroaches, which are also associated with allergies such as and disease. Substandard housing is also prone to rat or mouse infestation.

In late adulthood it is likely that we feel the cold more than when we were young reasons, such as health (medication for heart problems thins the blood), thinning subcutaneous fat, or because elderly people move around more slowly than youn substandard housing, where poor insulation means that heating rooms is both dif adulthood, perceived or true poverty living on a pension may mean that difficult c buying nutritious food or paying for heating, not both. Hypothermia occurs when causes confusion, loss of mobility and unconsciousness. Older people living by th due to a fall or accident that leaves them unable to move, get help, or keep thems help. Severe hypothermia occurs when the body temperature falls below 28° C (o 37° C). Prolonged exposure to cold and hypothermia can affect organs and cause limited to older people, as babies and children can be affected too.

Substandard housing can also affect levels of self-worth and self-esteem. It is diff your home if the conditions there are awful, limiting the simple pleasures of socia school because of where they are living and parents will feel guilty that they are e care for to surroundings.

Temporary accommodation may not be substandard, but often there are problem parent family with two young children will often be assigned a room in a hostel or bathroom or cooking facilities. The stress caused by lack of space and privacy can mental health issues, which can lead to substance dependency and abuse, crime a Children will have no safe space to play, or quiet place to do homework. Tempora families have to move frequently, and may not be able to stay in the same area, w schooling and the parents' ability to find and keep a job.

Substandard living conditions will affect anyone who becomes homeless. Homele walks of life and all ages. The reasons a person becomes homeless are many and job, arguments with family or partner, mental health issues, dependency issues, a etc. People living on the street are more likely to suffer violence, have multiple he and will die at a younger age than is usual in society (around 47 years of age a the homeless in the UK). Homelessness affects our ability to register for school, Jo from social services and GP surgeries, due to the lack of a permanent address. As isolated and vulnerable people from services that they are entitled to and need.

Insecure environments

Insecure environments will affect the health, physical development and mental w
and families, particularly as they are often linked to poverty, homelessness, ment
Individuals and families who are in temporary accommodation or homeless and li
an insecure environment that is more likely to be unsafe, cold, damp and dilapida
environments include areas where there is drug and alcohol abuse, at home or in
where a child or one of their parents is subjected to ph[illegible]l, psychological or sex

[illegible]as with high traffic density limit wher
expose them to high levels of pollution.
play and develop physically, this will imp
achieve gross and fine motor milestones.
and schools may find that they provide t
learn how to kick a ball or ride a bicycle.
at home, school and the wider communit
Systems theory) influences all areas of le
and personal, social and emotional) and
Adolescents who have no access to youth
more likely to join gangs and engage in ri

Insecure environments will also affect health, especially if a family struggles with
to seeing others struggling with addiction. Such environments can trigger feelings
depression as parents struggle to keep both themselves and their children safe. A
or abuse, either against other family members or in public areas. Children who ar
early age may come to see it as a normal way of dealing with people and problem
experiment), and find it difficult to adjust in other social arenas such as school. Th
education and learning (perhaps having to repeat a year) lead to exclusion.

Children living in environments wh[illegible]ey are exposed to abuse, or with adults w
abuse as children, are less li[illegible]s succeed at school or have good relationships la
appropriate h[illegible]an l[illegible]r[illegible]. Abuse of all kinds leads to poor self-esteem and fe
Victims of a[illegible]often self-harm or attempt suicide, and this affects future adult r

Access to healthcare

This is an issue for many families living in poverty where some parts of healthcare
to be paid for. In the UK, free healthcare is available for those who are deemed o
visitors or failed asylum seekers have to pay for treatment. Families who can affo
healthcare can avoid long waiting lists and have the option of different treatment
through the NHS. Some health trusts do not offer medication or operations that
trusts, leading to a 'postcode lottery' as to what you are entitled to receive, which
treatments, especially with life-limiting or chronic diseases such as cancer or asth

Some health trusts and services in the UK are under such pressure that they
are unable to provide checks as recommended by the D[illegible]partment of Health;
for example prenatal and well-woman checks. Ba[illegible]bies [illegible]born to mothers who
were unable to access prenatal supp[illegible]ma[illegible]e low birth weight or other
conditions as a result of poor [illegible]dition or the mother's lifestyle choices during
pregnancy. Low birth w[illegible]t babies are more susceptible to infection and
illness duri[illegible]first year of life. Once born, developmental milestones may
be missed if [illegible]ly is not visited by a health professional, or does not attend
a clinic regularly during the first three years of an infant's life. Congenital
defects, conditions or illnesses may not be diagnosed or treated for the same
reason. Poverty or difficulties in access may mean the family is unable to
access specialist support such as speech and language therapy.

Families might be registered at a surgery or clinic, but may find it difficult to get t
Patients with a disability (for example, wheelchair users) may be prevented from
lack of lifts or ramps, or are physically unable to get on a bus. Those who work, a
see a doctor for what they consider is a minor ailment, may only get an appointm
necessitating more expensive and long-term treatment. Opening hours may also
follow-up appointments. Actually getting an appointment within a reasonable ti
areas of dense population, due to pressure on health ser

How we interact with the healthcare syst healthcare professionals can als
and development. Studies have found that children and adolescents who are obli
in hospital, without pro al care and support, are susceptible to depres
low self-est s missing out on education and social stimulation. Famil
will also suf ings of guilt, powerlessness and anxiety.

Families who do not have English as their main language may have difficulty in ac
not understand how the system works, or the information they receive. Certain g
are only entitled to emergency care, which may not address deeper issues, partic
loss. If issues are not addressed, they may cause mental health problems later in
new and secure environment.

War, famine, social disorder (strikes and riots) or natural disasters can put immen
they can offer and how they can be accessed, affecting treatment outcomes and

B3 Revision questions

1. What types of environmental factor can affect th and developm
2. How can air pollution affect dev en
3. What situations mi water to become polluted or contamina
4. How c pollution affect growth and development?
5. Why is noise pollution a problem for growth and cognitive develop
6. How does light pollution affect growth and development?
7. What is melatonin?
8. How can substandard living conditions affect growth and developm
9. What is an insecure environment, and how might it affect growth an
10. What issues might affect a person's ability to access healthcare?

B4: How social factors af
growth and developme

Various social factors can influence how people interact with others and how life
personal growth and development. Our social status can be defined by our ethni
income, where we live, relationships, social class, education and age. As Bronfen
theory shows, there is a multitude of differe systems and subsystems that influe
child and their family throughout life.

Family dysfunction

Family relationships are key to emotionally anchoring the child securely and supporting cognitive, communication and physical development. Families that experience divorce, separation or bereavement may struggle because of the emotional strain that this loss and trauma causes. These changes can lead to a loss in status, changes to lifestyle and income, house and school moves and loss of friends and family. Negative emotions such as jealousy, sibling rivalry and arguments can tear families apart, or, if tackled positively, bring them closer together. Loss, trauma and bullying will affect how we view personal relationships and affect our levels of self-esteem, both at the time and in the future. Children and adults who have experienced any of this may resort to violence, bullying or other forms of abuse to retrieve some form of self-worth or control in their lives. Family relationships are also affected by parenting styles, as shown in the table, as they create interactions and reactions between child and parent that will have a lasting effect on relationships.

| How the social effe
growth and develo |
|---|
| **Authoritarian** | Ina
get
agg
beh |
| **Authoritative** | Res
cor |
| **Permissive** | Ma
to f
self
est |
| **Uninvolved** | Unl
ful
ma
beh |

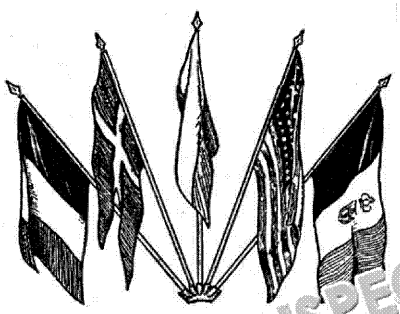
Mental health or other health issues, such as postnatal depression, can also affe
on cognitive development. Mary Ainsworth's Strange Situation test showed that
attached had difficulty in exploring a new environment full of toys and interacting
levels of cortisol are seen in babies who are not nurtured, leading to the health ar
stress. Disability of any kind may lead to a family being socially excluded and bec
poverty, limited access to transportation and services or dependence upon charit

Bullying

Although bullying can happen at any time during our lives in any relationship, mar
experience bullying, either at school or in peer groups, as they develop their own
stages of psychosocial development). The social effects of bullying can have a neg
development and lifestyle choices as it lowers levels of self-esteem. There are ma
including cyber bullying (through social media), physical bullying and psychologica
adolescents who are bullied feel ostracised, isolated, misunderstood, afraid and a
lead them to engage in risky behaviour, violence, self-harm or suicide. The bully
self-esteem, which are raised by the power that bullying gives them. These social
as children become adults and parents.

If bullying at school becomes too severe, parents may feel obliged to find a new s
the child not only has to cope with a new set of friends and teachers, but also with
different point in the curriculum, which may have implications for education resul
Bullying in the workplace is also an issue for both men and women. It can affect j
depression. It can also affect possibilities for promotion, with others being promo
income and status.

How culture, religion and beliefs affect growth



Throughout history, culture, religion and belie
are raised and educated, and what is expecte
their lives. For example, some cultures and re
particular style of clothing, or some families be
their own room from b
remain at hom
nurse
challenges and difficulties, caught
family's cultural traditions and those of their s

How we int
of five, most
or characteristics that are similar to adult ideas of stereotypes (Katz, 1983). As a generalisation, boys are expected to be more confident, aggressive and assertive, whereas girls are expected to be more caring, quieter and emotionally 'in tune' with others. Some cultures find it more difficult to accept a woman in a position of authority. Members of the LGBT community may also face cultural and social ostracism, bullying and violence because of the way they lead their lives.

Studies carried out by Marjorie Goodwin (1994), concerning peer-to-peer *interactions* between African-American children and Caucasian American children, showed that when playing hopscotch, the African-American girls were more likely to
on the rules being kept (e.g. not step on the line) thr
gestures and what we might think of as '
who made the mistake, whereas
the mistake pass, which
accountabili

Religious an
understanding. Schools may find that some children are not allowed to take part
as it is contrary to the family's beliefs. Jehovah's Witnesses will not allow anyone
transfusion, even if this would save a life. Females from certain ethnic or religious
to be examined or treated by a male doctor and avoid treatment because there is
some areas, swimming pools operate ladies nights, in order to allow Muslim and
without having men present, as otherwise they would not access that form of hea

Social and cultural ideas can also affect our diet and nutrition. Many people beco
reasons, vegetarian (no fish or meat) or vegan (no animal products, including fish,
affect the balance of proteins, vitamins and carbohydrates they are eating, leadin
bones or a compromised immune system. A balanced diet is vital for physical dev
childhood, adolescence and early adulthood.

Cultural and social environments also
use, smoking and sexual activit
more likely to suffer fr
of develop
cirrhosis of
attacks). Drug abuse is linked to mental health problems such as psychosis and de
users will have circulation problems causing ulceration or amputation of limbs. Se
partners or without taking precautions is likely to result in becoming infected with
such as gonorrhoea or HIV. Exercise of all kinds is recommended for people of all
heart, improves bone density and promotes a general feeling of well-being.

FGM (fem
cultural lif
choose for
UK, it is ca
Indonesia
involves re
inner and
vulva so a
menstrual
ages of fiv
lead to inf
menstrual
intercours
some fami
send their
be done to
advantage

Older members of ethnic minority families may find it difficult to learn English. V
as much a sociocultural tool as showing someone how to do something. Without
communication tools such as signing, it is difficult to understand and assimilate ne
needs. Families who have not yet mastered the language of the country they are
out on, or be unable to access, local social institutions such as playgroups, schools
receive help and assistance to which they are entitled. This isolation makes them
consequences of poverty, such as loan sharks, poor diet c[illegible] standard housing.
cultural standards that are not reflected in this so[illegible] f[illegible] example, regarding pa
to support their children's learning and d[illegible]m[illegible].

B5: How economic factors a growth and developme

Income, expenditure and employment status

The links between the health and wealth of a popu[illegible] or [illegible] a country are many and complex. The World Health Organisation [illegible]ishes annual statistics on world health [illegible] highlight the differences between rich and [illegible]s. For example, according to WHO [illegible]s from 2015, there are 239 maternal deaths per 100,000 live births in low- and middle-income countries, versu developed countries. However, disparities occur within areas figures from the Office for National Statistics (2012–2014), he persistently lower in some areas of northern England and Sco

The health education of a population is relative to the economic status of a count uses taxes to inform the population of healthy life choices (and the consequences services and benefits in many different ways, such as advertising, leaflets and info and health centres, websites, drink-driving or anti-smoking campaigns, etc.

Adults and children from poorer families have poorer health generally, will miss m illness, and have lower attainment outcomes at school (DWP: State of the nation welfare dependency in the UK, 2010). Living in poor or overcrowded conditions — substandard housing – increases the risk of infectious diseases and chronic condit the UK people are more likely to die from non-infectious diseases related to lifesty cardiovascular disease and complications from diabetes.

Poverty is a subjective issue, relative to the economic status of the average popul families face difficult choices every day, which may not be life-threatening but imp and develo[illegible]of children, nursing mothers and the elderly. Providing nutritio difficult with[illegible]oney left after rent, utility and other bills are paid each week o cold and hungry are unable to concentrate, feel tired and may be disruptive and d nutrition (for the mother) is the main factor in low birth weight babies. Low birth infections, and slower to achieve growth and developmental milestones, especiall after the baby is born. Poor nutrition and diet is also a factor in diseases and com example, Type 2 diabetes.

Poverty is a major issue for the government, as it means they receive less tax inco paying out more in social support and services. Poverty affects individuals and fa and lack of money affecting the family's status, the type of housing they live in an higher education which is not free. Poverty and money worries will affect relation family. A loss of status, due to job loss or change in other circumstances, can affe creating feelings of anger and envy, or leading to depressi[illegible]nd feelings of helpl of the main reasons for divorce and separation.

Families in low-income jobs often do not have permanent contracts or guaranteed irregular and they receive[illegible]day pay or pension. Stress and anxiety, resulting financially, affect family relationships, as well as putting pressure on the main hours are often[illegible]even if they impact on family life. Families with higher incomes whether one partner stays at home to raise the family, the type of childcare they c

The effects of education on growth and develo

Statistics show that the better educated a nation is, the higher the average incom the UK the Office for National Statistics (2013) shows that, in general, an employe more over their lifetime than those who join the workforce with only GCSEs.

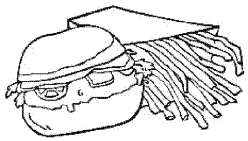
An educated workforce is more likely to be more efficient a[illegible] productive, and open to innovation and change. This will lead to g[illegible]oductivity, and higher incomes, which may lead to the introductio[illegible]echnologies and again improve productivity. Industries a[illegible]mes looking for a place to invest and increase production facilit[illegible]e likely to consider areas that have a well-educated wo[illegible]ce

The quality [illegible]ucation offered increases as a country's economy improves, and schools, pay teachers' salaries, improve teacher training and offer free education that provide well-funded Early Childhood Education (ECE) tend to have a better e The early years are recognised as a time when children are developing skills at a r communication and social and emotional skills). Children at this age need innovat environments, as well as educated caregivers and teachers to make the most of t

Schools, for all age groups, not only teach cognitive skills but also provide a found cognitive skills such as honesty, perseverance, reliability, problem-solving and ind skills brings different social benefits to the community. Some cultures value certa others; for example, Western cultures value independence and individuality, whe conformity and reliability.

The higher the level of education within a community, the lo[illegible]er the birth rate as child, because they wish to establish a career or imp[illegible]ei[illegible]economic status, o choose to have a child, the child is more likely to be born healthy, and survive infa to parents who have a high level of [illegible]ti[illegible]are more likely to receive support a years and go into further ed[illegible]n some kind. Families who have higher incor to pay for the [illegible]ucation of their children, either in entirety or through extra tutor offers a bet[illegible]nce for them to succeed later in life. In the UK at present (201 college or u[illegible]ty is not funded by the state, which means students have to tak family help to cover tuition and living costs.

The effects of lifestyle on growth and develop



Lifestyle relates to how we choose to live our lives. It will b religious, social and cultural norms, income, family and pers these 'choices' are not ours to make or have an influence o by poverty, or are religious or culturally based, e.g. diet or g

An unhealthy lifestyle will impact on growth and development in many ways. A poor diet high in fats and sugars will predispose a person to obesity, high blood pressure and cholesterol, cardiovasc[illegible]isease and other related illnesses, including cancers and diab[illegible]te. Diets that are low in certain nutrients – for example, iron (ca[illegible]aemia) or protein for strong bones – will also affect healthy growth and development.

Studies hav[illegible]n [illegible]tter-quality school meals have a positive effect on student [illegible]tration and attainment levels in class, and cognitive development in general. Malnourishment can make an individual more vulnerabl may have long-term consequences on growth and development. During adolesce images, combined with low self-confidence and feelings of self-worth, can lead to ultimately anorexia or bulimia. The diet of many adolescents and young adults in and based around processed food, rather than fresh fruit and vegetables.

A lack of exercise can also lead to weight gain and also affect the strength of bone osteoporosis in late adulthood. Many elderly people are affected by osteoporosis broken hips, legs and arms, which impacts on their ability to continue to live at ho have led an active life, exercising regularly, tend to have better health prospects o

The impact on health through the use of drugs, including tobacco and alcohol, is v be lifelong, and life-limiting even if use is occasional, or only happens over a short associated with their use or addiction include lung cancer, liver cancer, psychosis, par impact on relationships at home and at work. Any long-term illness will affect job on income and the ability to live the lifestyle you want.

Some lifestyle choices are associated with engaging in risky behaviours, such as no sex or taking part in extreme sports. Becoming pregnant, or facing a life-changing opportunities for relationships, career, financial standing and the life we are able to be a trigger for depression and feelings of guilt. A life-changing injury may be phy brain injury, loss of hearing or vision or an injury that leaves you wheelchair-boun lesser degree, affect feelings of self-worth as well as the ability to do certain thing to feelings of isolation and exclusion, anger and depression, especially if health an

The effects of where we live on growth and dev

The location of our homes can have a major impact on growth and development, associated with pollution, isolation in rural areas, length of time to get to a hospit health and education services, etc.

Inner cities: In inner cities and even out into the suburbs, the quality of the air can be poor. Particulate density from cars, lorries and collective traffic increases the closer you are to main roads and motorways. Air pollution impacts on health by aggravating respiratory disease, asthma and other allergies. Where crime is high, children may not be encouraged to go out to play, or may not have a safe place to play, affecting gross physical development such as running or riding a bicycle, and social skills. Also, although medical help may appear to be close by, traffic congestion can sometimes negatively affect the length of time it takes to reach a hospital or clinic in an emergency.

Areas of growth ar
where we live:

- **Physical deve**
  access to heal
  in general and
- **Cognitive de**
  education, Int
- **Social and em**
  to clubs and g
  different thera

Suburbs and smaller towns and villages: These too may have hot spots where air p high. However, there is more likely to be a safe place for children to play and dev Communities may be more cohesive than in inner cities, where housing mobility t interactions may be more positive, with families and individuals involved in schoo

Rural areas and farms: Although these areas may seem to provide plenty of healt they are also areas of work. Accidents involving farm machinery, ponds and slurry fatal or cause life-changing injury. Depending upon how isolated the rural area is, access health and education services easily, or even meet other people, which ma and emotional development.

Substandard housing: As we have already seen, substandard housing can affect he overcrowding or dangerous environments. Substandard housing is often occupi may struggle with day-to-day responsibilities such as paying the bills and keeping children, who may struggle at school due to lack of support at home, a place to do come over to play. All family members will be affected by the environment, whic depressed, helpless and isolated, with nowhere to turn to for support.

B6: Major life events that affect d

Predictable and unpredictable events

Major life events can happen at any time during our lives. Some are predictable, unpredictable. Some you can hedge against, others you just have to take as they

Predictable life event	Unpredictable
Pregnancy and birth	Chronic illness (phy
Marria	Separation an
Go nu or school	Sudden death of
to university	Personal ac
Leaving home	Being fired from a jo
Moving house	Hospitalis
Starting employment	Seeing or experiencing a traur
Getting a promotion	War and soci
Giving a speech	Disability (due to accident, il
Getting engaged	Abuse (physical, sexual, n
Retirement	Sudden change of h

Predictable life events may not happen to everyone, but they are considered to be normal events that do not come as a surprise when they happen. This does not necessarily mean that we cope with them any better than other events. Unpredictable life events are events that happen suddenly, with little or no warning, although the signs may have been there for a while (e.g. separation and divorce or chronic illness). Both predictable and unpredictable events can be they involve change, and change leads to stress. Some people respond well to str How we respond is also relative to circumstance, the experience and support we receive as the time of life at which the event occurs, how the change impacts on any resp health at the time, and whether you are in control of what is happening or the eve other people's reaction, will also affect your response and ability to cope.

Children and adolescents often show the effects of stress through their behaviour. They may become aggressive or withdrawn, destructive or overly compliant, or have trouble eating and sleeping. Adults may internalise their feelings. On the surface everything will appear to be fine, but otherwise the person will be struggling to deal with what is happening.

The positive and negative effects of exp unpredictable life events on growth an

Positive	
• Motivates	•
• Enhances social and emotional skills, supporting others	•
• Brings people together	
• Enhanced self-worth	•
• Positively challenges	•
coni ills	•
Positively challenges self-concept	•

Predictable and unpredictable life events can be stressful. Stress can be both a positive and negative driving force in growth and development. Too much stress can demotivate a person, making them mentally and physically unwell. The stress, for example, cau member or a loved one can impact on future relationships, or cause a mental bre event. Stress causes an increase in the production of cortisol (associated with the 'fight or flight' reaction). If cortisol levels remain high for extended periods of tim person's health, behaviour and relationships with others.

Children who experience an unstable home life will be exposed to more stress tha
be due to economic factors (parents losing a job), family break-up (divorce and se
in childcare or school arrangements, or moving house. All will have some kind of

Stress can be a factor in early years and school environments for many children. C
for example, will be 'moved up' into different age group rooms at the age of 18 m
years, or change setting from day nursery to school nursery at the age of three or
school, they may well have experienced five or six different childcare and learning
minder, baby room, toddler room, preschool room or nursery, reception class and
have a different set of adults and different rules and expectations, which, depend
transition, can affect confidence, learning and the attachment of the child to care

Children who have to move school, particularly in the middle of an academic year,
challenges relating to changes in curriculum and teaching staff, friendships and so
negative effect on ideas of self-worth and self-concept as well as cognitive develo
University study (Singh et al., 2014) have discovered that frequently changing sch
later years, especially adolescence. The study discovered a 60% increase in psych
hallucinations and delusions in adolescents who had moved around a lot during e
recommended that schools should be more aware of the background of new stud
support to help them integrate more quickly.

Stress is also associated with various medical conditions, such as irritable bowel sy
syndrome (CFS or ME) and fibromyalgia. These conditions are often difficult to tr
individuals in many different ways. Those who suffer with chronic stress-related c
difficulty in holding down a job, taking part in social gatherings or studying and tal
traumatic events may also trigger mental health issues, such as depression, or a fe

How our lives develop is linked to many different social and cultural aspects, whic
due to the effects of globalisation, patterns of immigration and migration and the
social media. Traditional ideas of what is a predictable or unpredictable life event
eventually become outdated.

Holmes–Rahe stress model

The Holmes–Rahe stress model has been developed to show how certain stressor
individual, predisposing them to developing illness. Two models have been devel
children. In order to work out how stressed you are, look at each event. If you ha
year, tick 'yes'. Add up the points (if you have experienced the same event multip
that event). The number of points you score will show whether you are at risk of
points is high risk, 150–299 points is medium risk and below 150 is low risk.

The theory does not take into account that some people may have greater emotic
compared to others, or that cultural factors may influence how different people e
developed through supportive and loving family and social relationships, as well a
community and work environment.

Adult life change unit	Rating	Child life c
Death of a spouse	100	Death of a parent
Divorce	73	Unplanned pregnancy/a
Marital separation	65	Getting married
Death of a close family member	63	Divorce of parents
Imprisonment		Acquiring a visible defo
Personal injury or illness		Fathering a child
Marriage	50	Incarceration of parent
Losing a job	47	Marital separation of pa
Marital re tio	45	Death of a brother or si
Retirement	45	Change in acceptance b
Change in health of family member	44	Unplanned pregnancy o
Pregnancy	40	Discovery of being an a
Business readjustment	39	Marriage of parent to st
Gain a new family member	39	Death of a close friend
Sexual difficulties	39	Having a visible congeni
Change in financial state	38	Serious illness requiring
Death of a close friend	37	Failure of a grade in sch
Change to different line of work	36	Not making an extracur
Change in frequency of arguments	35	Hospitalisation of a pare
Major mortgage	32	Jail sentence of parent f
Foreclosure of mortgage or loan	30	Breaking up with boyfri
Change in responsibilities at work		Beginning to date
Child leaving home		Suspension from school
Trouble with in-laws	29	Becoming involved with
Outstanding personal achievement	28	Birth of a brother or sist
Beginning ing school	26	Increase in arguments b
Spouse sta stops work	26	Loss of job by parent
Change in living conditions	25	Outstanding personal a
Revision of personal habits	24	Change in parent's finar
Trouble with boss	23	Accepted at college of c
Change in residence	20	Being a senior in high sc
Change in schools	20	Hospitalisation of a sibli
Change in working hours or conditions	20	Increased absence of pa
Change in church activities	19	Brother or sister leaving
Change in recreation	19	Addition of third adult t
Change in social activities	18	Becoming a fully fledge
Minor mortgage or loan	17	Decrease in arguments
Change in sleeping habits		Decrease in arguments
Change in eating habits		Mother or father begin
Change in number of family r ion	15	
Vacation	13	
Major hol	12	
Minor viola of law	11	

The Holmes–Rahe theory links to the stress–diathesis model, which hypothesises when a person is exposed to different stressors. The stressors may be psychologi or physical. Certain cancers, autoimmune diseases and mental health problems h relationship of stress factors and predisposition to illness.

How can we manage change and foster resilience, so that we continue to live posi existence of a strong and supportive social network is cru[illegible]o alleviating the co events and promoting positive emotional well-be[illegible]. A l[illegible]k of family or social ne depression and poor life choices. A healt[illegible] and daily exercise are also import consequences of stress and the i[illegible]egative life events.

B4–B6 Rev[illegible]questions

1. What social factors affect growth and development?
2. How does culture affect growth and development?
3. How do economic factors affect growth and development?
4. What are the effects of education on growth and development?
5. What would be considered as unhealthy lifestyle choices?
6. How does the environment where we live affect physical, cognitive a development?
7. What types of event can be considered pre[illegible]ol[illegible] and unpredictab
8. What factors may affect your[illegible]c[illegible]to the stress of change?
9. What does the H[illegible]s-Rahe scale measure?
10. What f[illegible] affect mental health?
11. What factors influence becoming independent?

C1: The physical changes of a

From middle to late adulthood, the effects of ageing on our minds and bodies become more apparent. Deterioration occurs both internally and externally, and affects all parts of the body. Some of the effects of this deterioration may lead to an individual developing certain conditions or diseases which may affect their quality of life and life expectancy. Other effects of ageing, such as hair loss and wrinkles have no particular effect on health at all, but may affect our self-image and feelings of self-esteem.

Primary a
body age
cartilage

Secondar
due to di
misuse of

Cardiovascular disease (CVD)

Cardiovascular disease is an umbrella term for several conditions that affect the h
The main diseases associated with CVD are:

- atherosclerosis – build-up of fatty deposits (atheroma) in the arteries supplyi muscle, which may be caused by high cholesterol levels, smoking, diabetes o
- angina – a dull ache or pain in the torso, arms or stomach caused by atherom oxygen-rich blood to the heart muscle are narrowed by the build-up of fatty
- myocardial infarction (heart attack) – caused by pieces of atheroma breaking the supply of blood to the heart muscle
- arrhythmia (irregular heart beat) – this can be slow (bradycardia), fast (tachy and may be due to inherited genetic or physical problems, such as blockages
- heart valve disease – affecting the flow of blood through the heart

Stroke is similar to CVD but affects the brain instead of the heart. Strokes can be caused by blockages in the blood supply to the brain (ischaemic strokes) or burst blood vessels in the brain (haemorrhagic strokes) which cause damage to brain cells and function. Many older people suffer mini-strokes or transient ischaemic attacks (TIAs). TIAs occur because the blood supply to the brain is temporarily blocked and damage is usually minor and short-term.

Signs of a stroke
F **Facial weakn**
their mouth
A **Arm weakne**
S **Speech prob**
and understa
T **Time** – Call
of these sym

Both stroke and CVD can be caused by the same factors, many of which are associated with lifestyle choices. The health effects of CVD are shortness of breath, pain in the chest, upper abdomen, back, neck, jaw and throat, fainting attacks, weakness, coldness and sweating. It can be treated with improvements to lifestyle, medication and surgery to clear blocked arteries or replace heart valves. Sometimes, a pacemaker is fitted to regulate the heartbeat. Heart attacks are not always fatal, but will weaken the heart muscle and increase the likelihood of future heart attacks or strokes. Strokes happen without warning and the damage caused to the brain can lead to paralysis, aphasia (difficulty in speaking), confusion and dementia. Both CVD and stroke can affect the mental health of the patient, making them depressed and afraid to stress their body in any way in case it happens again.

Factors that under
CVD and stroke:
- high choleste
- diet high in fa
- smoking
- high alcohol i
- obesity
- insulin resista
- high blood pr
or narrowing
- lack of exerci
- family history
- ethnicity (stat
African and C
incidence of C

CVD is the number one cause of death in the UK, causing over a quarter of all dea
for those living in areas of high deprivation and poverty (British Heart Foundation
However, death from CVD has halved since the 1960s, which means that people a
longer with the effects of CVD than before. This places greater strain on health ar

Degeneration of nervous tissue

Degenerative diseases of nerves and nervous tiss[illegible] affect individuals at all st
each disease is unknown. The most com[illegible] these diseases are: multiple scler
disease, myalgic encephalomyeliti[illegible] Parkinson's disease. In addition, so
pain associated with aut[illegible] diseases such as polymyalgia rheumatica and fi
such as scia[illegible]

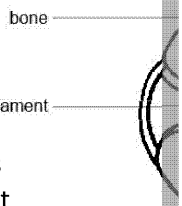
Condition and description	Effect on growth and development
Multiple sclerosis Chronic disease of the nervous system where the myelin sheaths of the nerves are gradually destroyed. Cause unknown.	Affects individuals in late childhood to middle adulthood. MS has many symptoms, including muscle weakness, fatigue, loss of balance, vision impairment, spasms and stiffness. MS affects the quality of life and is not life-limiting or fatal.
Bell's palsy Paralysis of the facial nerve on one side of the face. Cause unknown.	The paralysis affects the ability to close one eye and causes one side of the face to droop.
Motor neurone disease (MND) Chronic, progressive disease that affects nerves in the brain and spinal cord. Cause unknown although one form of MND [illegible] have genetic roots	MND causes wa[illegible] and weakness in muscles [illegible] affect the way you walk, [illegible] etc. Often life-limiting. Affects individuals in middle to late adulthood.
Myalgic e[illegible]lomyelitis (ME) or chronic [illegible]e syndrome (CFS) Chronic fatigue which may disappear, or reoccur. May be triggered after a viral infection. Cause unknown.	Affects individuals of all ages. Causes chronic fatigue, inability to concentrate, digestion problems, poor memory and disturbed sleep patterns. ME is not life-limiting, but can be life-changing if symptoms affect relationships, study at school, or keeping a job.
Parkinson's disease Chronic progressive neurological condition caused by the death of nerve cells that produce dopamine. Cause unknown.	Parkinson's disease mostly affects people over 60. It causes tremor, rigidity of movement, tendency to stoop and walk with a shuffling gait, and problems with speaking (aphasia) [illegible] swallowing (dysphagia)
Fibromyalgia Condition [illegible] nervous sy[illegible] becomes oversensitive to sensory stimuli.	[illegible] affect people of any age, but generally occurs in women over the age of 50. Causes pain and stiffness throughout the body, fatigue, weakness, trouble sleeping, and irritable bowel syndrome.

Condition and description	Effect on growth and development
Polymyalgia rheumatica Inflammatory autoimmune condition that affects the muscles and nerves in the neck, shoulders, arms and hips	Can affect people over the age of 50, but more usual in people over the age of 65. Pain and stiffness in affected areas often at the beginning of the day. Flu-like symptoms and wei[illegible]ss.
Sciatica Pain in the back and legs caused by irritation to or compres[illegible] the sciatic n[illegible]	Sciatica can occ[illegible]t any age, but is c[illegible]n older people due to p[illegible]ysiological changes causing degeneration or slipping of the discs between the vertebrae in the lower back.

Osteoarthritis

Osteoarthritis is a degenerative condition caused by wear and tear to the cartilage between the joints. Cartilage is essential to movement, as it cushions the space between the bones of the joint, preventing them from grating and grinding against each other. If the cartilage is damaged or worn down, friction between the bones will occur, causing inflammation and pain.

Simpl



Rheumatoid arthritis is different to osteoarthritis and is an autoimmune disease where the immune system attacks the body's joints. Rheumatoid arthritis can occur at any stage of life and onset can be swift, whereas osteoarthritis is age-related, occurring i[illegible] middle to late adulthood, and is a condition that evol[illegible]ow[illegible]. Both types of arthritis cause pain, inflammatio[illegible]d [illegible]ness in the joints.

Individuals suffer[illegible]eoarthritis can take anti-inflammatory medication o[illegible] affected joi[illegible]lle[illegible]ate symptoms. Operations to replace hip and knee joints a[illegible] in the hands[illegible]e debilitating as it compromises the strength of grip, making it [illegible] taps or chop up food. Osteoarthritis in the feet, knees and hips can make walking ability of a person to socialise, go shopping or drive a car.

Degeneration of the sense organs

The ageing process is unique to every individual, but after the age of around 70, w[illegible] deterioration in one or more of our senses. We have seven senses, sight, taste, s[illegible] (balance) and proprioceptive (body positioning and motion). The deterioration o[illegible] be affected by medication, smoking, alcohol, obesity and illnesses associated with Alzheimer's.

Sight

Presbyopia: This is the inability to focus on nearby objects, and is the most common age-related sight condition. It means you become more long-sighted. This is easily remedied by glasses.

Macular degeneration: The macular is a small area in the eye that controls our central vision, i.e. what we see when we look straight ahead. For some unknown reason, macular function can become impaired, affecting how we see faces, colours and our ability to read. There is no known cure. Macular degeneration may be inherited in some families. Macular degeneration affects only central and not peripheral vision, so a person suffering from this will not become totally blind.

Cataracts: These occur when the lens of the eye becomes opaque, which prevents light striking the back of the eye and producing an image. Vision will become increasingly cloudy as the cataract thickens. Cataract operations to replace the lens with a plastic one are quite common and successful. The cause of cataracts is unknown, but may be genetically linked. Individuals suffering from diabetes, taking certain medication or who smoke are more likely to contract cataracts in later years.

Glaucoma: This is a condition that can lead to blindness. It occurs because a bloc cornea and the lens, preventing the watery fluid in the eye from draining. This wi the eye which will damage the optic nerve. Glaucoma is more likely to affect peo genetic link. Once diagnosed, treatment consists of eye drops, other medication a the pressure.

Taste

Our sense of taste is inextricably linked to our sense of smell. Although the tongu can only recognise sweet, salty, bitter, and sour tastes. Taste is enhanced by the a our mouth and nose, which hit sensory and receptor cells in the nose. brain to allow us to enjoy the aroma and taste as one sense.

Our sense of taste, however, decreases as we age due to the deterioration and los in the nose. This can affect our enjoyment of food, meaning we either eat less, or to enhance whatever flavour we can taste. Too much salt or sugar in the diet can conditions, such as diabetes or cardiovascular disease. Many older people lose in their sense of taste and lose weight, becoming frail and ill.

Smell

As mentioned above, our sense of smell will deteriorate as we age, as the body is receptors as they die. Partial loss of the sense of smell is called hyposmia, and co Factors that are related to a loss in our sense of smell include:

- smoking
- use of some medication (e.g. for asthma)
- chronic rhinitis, sinusitis or colds (especially if treated with nose sprays conta
- radiation and chemotherapy
- degenerative conditions that affect the brain, such as Alzheimer's, Parkinson'
- nasal polyps (swellings in the nasal lining and sinuses linked to infection or as

Complete loss of your sense of smell means that you can no longer taste food so y has gone off, or that there is too much salt or sugar in it. It also means that you a dangerous liquids such as bleach which otherwise look like water.

Touch

Changes in the skin's elasticity and density will affect our sense of touch as we age. Our skin covers the body and through the sense of touch it feels cold, heat, pain and contact. Research shows that receptors in the skin find it more difficult to judge pressure, vibration and spatial differences. This is even more pronounced in the feet, which may explain why elderly people suffer from balance problems, as the nerve stimuli in the feet are not working well enough to give the information it needs for the vestibular and proprioceptive senses.

However, research also shows that texture recognition tends to remain stable through life: being able to hit the right buttons on a remote control, or turn the radio on without looking at it. Touch and pressure sensors and receptors can be affected by medication and medical conditions (Tremblay and Master (2015) 'Touch in aging').

Hearing

Hearing is a complex process involving tiny hair cells in the inner ear converting sound, which is taken by the auditory nerve to the brain. These hair cells do not regenerate, so if they are damaged, loss will be permanent. Hearing can be damaged by exposure to loud noise; for example, headphones or machinery. Also, as we age changes in cell elasticity or deterioration in the inner ear may play a role. Certain medical conditions and medication, genetic heritage may also play a role in hearing loss. Some people suffer from tinnitus, a ringing or buzzing in the ear, over time or become a chronic problem. There is, at present, no cure for tinnitus. Loss of hearing can make it harder to understand other people and social situations and cause us to miss important information, which can be frustrating and isolating. Hearing aids or cochlear implants may help some people.

Vestibular (balance) and proprioceptive (body positioning and

These two senses are closely linked. Balance is located in the inner ear, and relies on stimuli from rotational and linear movement to inform muscles about what our body needs to stay upright. The proprioceptive sense relies on the understanding of which parts of the body are where; for example, a hand reaching out to a hot saucepan handle. Inner ear infections, muscle injuries, intake of alcohol, drugs, some medication can affect both of these senses, le

Poor nutrition

Ageing, as discussed above, can affect the senses of taste and smell, making food less appealing. Also, problems with missing teeth, brittle teeth and dentures may cause difficulty for some, restricting the type of food they can eat. As our body ages, the efficacy of the gut to absorb nutrients decreases as well. Elderly people may also have restricted incomes and pensions, limiting what they can afford to buy, or they are less able to get to the shops to buy fresh and nutritious food, affecting health and type of food eaten. Processed foods, such as ready meals, usually contain fewer nutrients than food cooked from fresh ingredients, and may be high in salt, sugar and fat. Frailty, extreme weight loss can lower the body's ability to resist and fight infection, or recover from an operation.

Dementia and Alzheimer's disease

Dementia is an umbrella term for a number of progressive, chronic brain conditions for which there is no cure. It will affect one in 14 people over the age of 65, and affects women more than men. Early onset dementia is a condition which affects people between the ages of 40 and 65 and tends to occur in families where a parent or grandparent also developed the condition at an earlier age.

There are different kinds of dementia including Alzheimer's, all of which are caus neurons and neural path[ways] in the brain, sometimes caused by the build-up of p irreversible [pro]tein[s]. Symptoms vary, depending on the type of dementia condition a

- memo[ry loss]
- confusion
- difficulty organising and planning
- forgetfulness
- difficulty in finding the right word
- difficulty in managing simple daily tasks
- loss of independenc
- inability to sleep
- changes in mood
- depression and low
- frustration and som

As the dementia condition progresses, patients may lose the ability to speak, mov recognise family and loved ones.

The four main dementia conditions

Alzheimer's disease: named after Alois Alzheimer, who discovered the condition i degenerative, life-limiting disease and is the most common form of dementia. It i which lead to protein build-ups in the brain and may be inherited. Alzheimer's dis patients over 65, but early onset Alzheimer's can affect people as young as 45. Alzheimer's but there may also be links to severe brain injuries (e.g. car crash or b (smoking and cardiovascular disease). The prognosis of 6–12 years is usual once Al Medication and cognitive therapy that stimulate the brain may delay degeneration, be swift, requiring specialised care.

Vascular dementia: caused by a reduced flow of blood to the brain which hastens reduced flow can be caused by narrowing of blood vessels in the brain, a major st which means that vascular dementia can occur either suddenly or over a period o strokes can lead to dementia symptoms, such as aphasia (difficulty speaking) and as muscle weakness or paralysis on one side of the body. Vascular dementia is c such as diabetes, being overweight, smoking and cardiovascular disease.

Alzheimer's disease and vascular dementia often occur simultaneously.

Dementia with Lewy bodies: Lewy bodies are small, round clumps of protein that the brains of people suffering from Parkinson's disease), causing damage to and d As yet, there is no known way of preventing or curing this condition. Adults with many of the symptoms common for dementia sufferers, such as tremors (similar to P unsteadiness, periods of extreme alertness and drowsiness, hallucinations and tro

Frontotemporal dementia: caused by a build-up of proteins in the frontal a This part of the brain is associated with language, behaviour and the ability to pla condition do not usually suffer memory loss, but they will exhibit differences in be maybe becoming cold and unsympathetic, impulsive or doing things they would n overeating. There is no cure or treatment for the condition, although medication some of the symptoms. Due to the behavioural changes, people with this conditi

Effects of age-related illnesses on general health:

- Weakened immune system
- Prone to more infections
- Unable to recover from simple viral or bacterial infections
- Difficulty in swallowing, leading to dehydration or poor nutrition
- Loss of appetite
- Inability to exercise
- Decrease in bone density (osteoporosis)
- Muscular weakness affecting grip and balance
- Loss of vision
- Loss of hearing
- Combination of symptoms may lead to misdiagnosis and wrong treatmen
- Communication problems
- Mental degeneration
- Depression caused by isolation, loneliness and low self-esteem
- General slowing down in comprehension, mental agility, organization and

According to Age UK, 40% of people over 65 in 2017 suffer from a life-limiting or c improvements in healthcare, medication and general overall health (including bet people will live longer than they would otherwise have done 50 years ago. This pl healthcare and social services and institutions.

C1 Revision questions

1. What is the difference between primary ageing and secondary ageing?
2. What is atherosclerosis, and which other heart problems is it connected to?
3. What is the difference between ischaemic stroke, haemorrhagic stroke and transient ischaemic attacks (TIAs)?
4. What factors are involved in determining predisposition to CVD and stroke?
5. What health effects are associated with CVD?
6. What is the difference between the degenerative nervous system diseases multiple sclerosis (MS), motor neurone disease (MND) and myalgic encephalomyelitis?
7. At what stage of life might one get Parkinson's disease and what are the symptoms?
8. What is the difference between aphasia and dysphagia?
9. What is the difference between the causes of fibromyalgia and polymyalgia?
10. What problems might a person with osteoarthritis face?
11. Is rheumatoid arthritis the same as osteoarthritis?
12. What are the most common sight-related degenerative conditions, and what are their symptoms?
13. How can loss of taste affect quality of life?
14. What are anosmia and hyposmia, and how might they be caused?
15. Does circadian rhythm change as we get older?
16. What is tinnitus?
17. What is the proprioceptive sense?
18. What factors can affect the vestibular and proprioceptive senses?
19. Why might some elderly people suffer from poor nutrition?
20. What are the four main types of dementia?
21. What is the prognosis for someone diagnosed with Alzheimer's disease?
22. What are the general symptoms of dementia?
23. What is Alzheimer's disease?

C2: The psychological changes

However hard we try to keep fit and healthy our bodies will age and this can have psychological well-being. The realisation that we are gradually losing our indepen that previously would have been taken for granted, or suddenly finding it difficult social changes, can affect us in many ways.

Self-esteem and self-confidence

Self-esteem and self-confidence are linked to our idea of self-image and how posi Throughout adulthood women tend to have lower levels of self-esteem than men; as we reach late adulthood. The physical effects of ageing – for example, hair loss gain and loss of strength – can negatively affect this self-image and feelings of self through age-related illness or disability also affects our self-esteem, which may al personal worries. A study by Age UK in 2004 estimated that 40% of people in resi depression. Levels of self-esteem, however, tend to remain stable for those who and post retirement), are better educated, have good health and a strong social n

According to recent research (Orth et al., 2010) the process of retirement can hav esteem. No longer having to go to work, be involved in important decisions or tal can make a person feel they are no longer important and contributing to society c Changes in financial circumstances may mean a person has to change their norma or otherwise change the way in which they live, which is neither what they want n Self-esteem may also be affected by the realisation that you have not achieved wh and now it is too late.

Social change

Throughout our lives we will experience many social changes, which can have eith our situation at the time (retirement, chronic illness of a partner or house move (in late adulthood when a person may also be experiencing depression or low self- changes they are experiencing with ageing.

Retirement and chronic illness of a partner may lead to a need for a person to learn new skills, such as how to cook or clean a house, or helping a partner shower or use the bathroom. These role changes can be stressful and difficult, at a time of life when learning new skills or coping with change may feel particularly daunting. Loneliness can become a particular problem for people in late adulthood as their social network shrinks, and they are less able to take part in daily life due to illness, transport problems or frailty. Many will end up living on their own, trapped and isolated in their own homes. Loneliness is linked to premature death, dementia and self-neglect.

Financial concerns

Living on a pension may cause worry and concern as it is usually much less than a food and utilities will very likely remain similar. The government may provide extr payments, but not all elderly people will claim these, either because they are unaw or find it difficult to claim handouts. It is estimated that around 14% of pensione as 60% of median income). Couples are usually better off than single people. Ma money and their ability to pay food, utility, car and other bills. They also worry ab afford to live in their own homes, before poverty or age-related frailty or illness m care home or other type of sheltered accommodation, which is expensive.

Effects of culture, religion and beliefs

In late adulthood, the strength of social networks is important to the maintenanc well-being. Those who have a strong cultural or religious background and social i accept the consequences of ageing, as they feel respected, loved and cared for wi cultures, it is usual for three generations to live in the same house and share diffe

Successful ageing: what the ar[illegible]ists say

With ageing comes deterioration [illegible]ysical, psychological or mental, which a and enjoy life. However, [illegible] what actually constitutes successful ageing is to social con[illegible] cultural expectations. How does one define the term 'succes expected of [illegible]ccessful pensioner? Three general theories on ageing have bee Social Disengagement theory, Activity theory and the Continuity theory of ageing.

Social Disengagement theory

Elaine Cumming and William Henry's book *Growing Old*, published in 1961, put fo old there is an unwritten contract that expects older people to disengage from so responsibilities. This two-way process, whereby we deliberately disengage oursel interactions, is something we do in preparation, ultimately, for our death. They a result of social and emotional development, where we regress to a state of depen born. The loss of our physical independence, due to physical and physiological ch different things and lowers feelings of self-esteem which leaves us less inclined to including close family and friends. Unsuccessful disengagement occurs when we with society in the way we did before we reached late adulthood.

The book was written in the early 1960s and is ba[illegible]ed [illegible]e cultural norms and g such as that the man goes out to work a[illegible] woman stays at home, which do n tended to be shorter, age-relat[illegible]ne[illegible]t issues were more disabling and work wa Cumming and Henry be[illegible]e[illegible]t social disengagement differed according to ge socially dis[illegible] du[illegible] the social changes experienced when they retired, and t success and [illegible]l. They also saw social disengagement as something that both wanted, and that disengagement would not take place if one party insisted on co

Once society, i.e. families, friends or less personal social networks, had decided to 'disengage', then that person would become isolated and no longer considered as useful, successful or relevant to the needs of society. It is a harsh theory, which Cumming and Henry believe happens in all societies but varies according to different cultures, and is necessary to the process of an individual's acceptance of the inevitability of death.

Factors that might affe engagement in or disen

- cultural expectations
- health
- financial status
- environment they ar
- personal circumstan dependent children
- social network

Activity theory

The educationalist Robert J Havighurst (1900–1991) proposed that successful agei
continuing to be an active participant in life. This could be through social clubs an
taking part in family life, for example, looking after grandchildren. His theory buil
feelings of self-worth and self-esteem were necessary to allow a healthy continua
by general physical and mental decline. Activity theory w[illegible] suggest that adults
active feel more successful and are less affected b[illegible]ife changes such as reti
even the death of friends and loved ones.

Activity theory, though, i[illegible]the idea that an adult is able and willing to tak
activities, a[illegible]ap[illegible]learning new skills in order to take part. Not all have t
some may t[illegible]onic conditions such as diabetes or cardiovascular disease seve
they can engage in; for example, playing bowls, dancing or playing bingo. Statistic
Survey 2015–2016 show an increase year on year in the number of people over th
informal and formal voluntary work.

Continuity theory of ageing

Continuity theory does not consider late adulthood to be a separate part of life, b
everything that has gone on before. People who successfully embrace the life cha
who continue to enjoy the personal lifestyle, habits, relationships and preference
adulthood. As such, they have the coping skills necessary to be able to adapt to c
have the confidence to forward plan within comfortable parameters. Ageing doe
break with a previous life.

Health provision for the aged

Considering that statistics show that one in three girls and one in four boys born in 2011 will reach the age of 100 (ageuk.org), government and local councils are se[illegible] solutions to what is the best way to supp[illegible] ag[illegible]ng population. Generally, there is a f[illegible]nsuring that individuals retain their in[illegible]e and quality of life for as long as po[illegible]e. [illegible]uit, there are several charities and social i[illegible]ons that work to provide different services for older people to ensure that they can stay in their homes. These services are often more cost-effective than residential care homes, and allow older people to remain in their local communities close to friends, neighbours and family, surrounded by their personal belongings and memories.

Some of the different types of assistance that older people can draw upon should they need it include:

- various needs assessments to assess what services or help a person might need in the home, e.g. having their shopping done for them, a handle on the wall in the bathroom or a stair lift installed
- meals on wheels – provides warm cooked meals f[illegible]o[illegible]le who are housebo[illegible] themselves or are unable to cook for ther[illegible]se[illegible]ves[illegible]d are at risk of malnutriti[illegible]
- Befriending – operated by many [illegible]fer[illegible]ocal groups, befrienders will visit a[illegible] twice a week to chat
- Day Centres – [illegible]ff[illegible]ifferent activities
- home-[illegible]pp[illegible]t – offering help and support in the home; for example, wi[illegible]
- telecare[illegible]rsonal alarms and monitoring services
- residential care homes – providing 24-hour personal care and meals
- convalescence home or rehabilitation centre, where a person can recover aft[illegible] no support and help at home and receive appropriate therapy and treatment[illegible]
- sheltered accommodation – residential area where owners have their own pl[illegible] oversees the entire development, ensuring residents are keeping well. Often[illegible] activities.
- winter fuel payments
- free bus travel

Not everyone is [illegible] after the age of [illegible] influence success[illegible] ageing well lifest[illegible]

- income
- health
- disability
- mental heal[illegible]
- isolation in [illegible]
- substandard[illegible]
- poor nutritio[illegible]
- poor educat[illegible]
- abuse
- trauma and[illegible]
- substance d[illegible]
- cultural and[illegible]
- communicat[illegible] English as a[illegible]

Economic effects of an ageing population

According to the Office for National Statistics, life exp[illegible]cy in the UK has contin[illegible] In 1901 it was only 45 years for men and 49 [illegible]rs for [illegible]men, yet now according t[illegible] 2015, life expectancy in the UK is 78.[illegible] [illegible] and 82.7 for women. In 1948, the [illegible] the population died before t[illegible]ea[illegible]ed the age of 65, which had fallen to just 7% proportion of peopl[illegible] in the UK population is increasing.

There are fo[illegible]n reasons accounting for this increase:

- better food supply and nutrition
- better access to medication, GP and hospital services
- better education improving health and lifestyle choices
- better hygiene and sanitation

People are living longer, and the majority remain fairly healthy even if they suffer conditions. This is due to improvements in medication, treatments available, imp and information and education about lifestyle choices. However, since people are social care system, from hospitals to home-care agencies, are having to take care related conditions, disabilities and diseases, such as dementia, arthritis and catara than ever before. These conditions may require specialist training and environme strain on the NHS and public healthcare system in the UK.

According to the Age UK publication 'The [illegible] and Care of Older People in Engla public spending in health and social care since 2005 have impacted on all areas of care in the UK. Fewer ra[illegible]mean that only those with greatest need receive all even tho[illegible]ey [illegible]e entitled. This is particularly true for the elderly still li problems in[illegible]to get appropriate support so they can maintain their indepenc Additionally, more and more elderly people who are entitled to local-authority-fu asked to pay top-up fees, or employ their own private care providers and home h services are overwhelmed with requests from others and unable to provide the se

The impact of reduced funding and higher numbers of elderly patients affects GP accident and emergency departments and hospital waiting lists and bed availabili likely to take up more time in accident and emergency departments while needs a appointments due to complexities of need (both physical and mental). A reductio convalescence and nursing home places, combined with increased demand, mean free up beds as they have nowhere else to send recovering patients to (so-called '

Not everyone over 65 who remains in good health wishes to retire, and many con time, paying tax to the state (although retirees are exempt from paying National I allows an employee to continue working for as long as [illegible]sh provided it does the company in any way. Many grandparents [illegible]ide [illegible]ducare services for their to work and thus pay taxes used to fu[illegible]go[illegible]ment spending. Others may do vo charities and private organisati[illegible]s in [illegible]ny different ways, allowing donations to whatever the charity [illegible]isation does.

C2–C3 Revision questions

1. How can ageing affect our self-esteem?
2. What kinds of social changes might we experience in late adulthood
3. How can financial concerns affect the quality of life in late adulthood
4. How might culture or religion and beliefs affect the quality of life in l
5. Which three theories exist to explain successful ageing?
6. What are the main premises of Social Disengagement theory?
7. What factors might influence how or if an individual disengages fro
8. What is the main proposal behind Activity theory?
9. How does Continuity theory of ageing differ from Activity theory an theory?
10. How does an ageing population affect society?
11. What factors might negatively influence ageing, and make it a less s some people?
12. What was the life expectancy in the UK for men and women in 1901,
13. Why is life expectancy increasing?
14. What are the main economic challenges associated with an increase

Key Terms

Anosmia	Complete loss of the sense of smell
Aphasia	Difficulties in speaking a…king yourself underst
Atherosclerosis	The build-up of …deposits (atheroma) in the art
Behaviourist	D… pr…s shaped by the environment (nurtur
Carcinogen	S…stance responsible for triggering cancer
Cataracts	When the lens of the eye becomes opaque, affecti
Chromoso…	A ribbon-like structure composed of many genes
Congenital	Any form of physical or metabolic anomaly that aff
CVD	Cardiovascular disease
Diathesis	Genetic or biological predisposition to illness or dis
Dysphagia	Difficulties in swallowing
Gene	Section of DNA which carries the code for a particul inherited traits
Glaucoma	Condition which can lead to blindness
Haemorrhagic stroke	Stroke caused by burst blood vessels in the brain
Holmes-Rahe scale	List of stressful life events, numbered according to i
Hyposmia	Partial loss of the sense of smell
Ischaemic stroke	Stroke caused by blockages in the blood supply to t
LMIC	Low- and lower-middle-inco…e countries – World H developing countrie…
Macular degeneration	Impairme…t of t…e …acular, affecting how we see fa
Maturational	D… pr…t occurs in a fixed sequence which is no
ME	…yalgic encephalomyelitis, also known as chronic fa
MND	Motor neurone disease
Nativist	Development is shaped by innate capabilities and in predetermined
Osteoarthritis	A degenerative condition caused by wear and tear t
Osteoporosis	Brittle bone disease
Presbyopia	Inability to focus on nearby objects
Predisposition	Probability that you will have certain abilities or cha
Primary ageing	Changes that occur as the body ages, e.g. wrinkles, joints or grey hair
Punnett square	Probability chart to assess the probability of parent genetic trait
Resilience	The ability to cope with unexpected events and cris
Rheumatoid arthritis	Autoimmune disease wher…he immune system att
Secondary ageing	Changes that occ…ue …disease, illness, chronic c
Siblings	Childr… …sha…at least one adoptive or biologi
Stress	Ne…ti…e emotional state making you feel unable to
Stressor	Any event or situation that causes stress
Tinnitus	Ringing or buzzing in the ears
Transient is…mic attack (TIA)	Small stroke caused by temporary blockage in the b

A1: Physical development

1. What are the six different life stages and what ages are assigned to them?
   - Infancy 0–2
   - Early childhood 3–8
   - Adolescence 9–18
   - Early adulthood 19–4
   - Middle adulthood 46–
   - ate adulthood 65 plu

2. Define growth.
   - Growth refers to physi[illegible]nd [illegible]siological changes that affect the body. Physi proportion (inc[illegible]eight and weight, changes in the size of body organs, re[illegible]the[illegible]ctions of the body (puberty and menopause).

3. Define development.
   - Development refers to how the body organises itself within the physical structu new skills and learn to apply them.

4. At what life stage do we reach our adult height?
   - Adolescence for girls (around 18), and early adulthood for boys (around 20)

5. What does 'centile' mean with regard to height and weight charts?
   - Centile means 100. If a child is at the 50th centile, then they are number 50 in a

6. What is the difference between proximodistal and cephalocaudal development?
   - The axis along which development happens. Cephalocaudal is longitudinal fro horizontal from the centre to the periphery, e.g. from shoulder to fingers.

7. What is a developmental milestone?
   - Developmental milestone: the age by which a child should have achieved a cert sentences or crawling

8. Provide examples of g[illegible]ones for each life stage.
   - Infa[illegible]0–
     - [illegible]ng in weight by the end of the first year
     - [illegible]abling in height by the end of the second year
     - head circumference increases from around 14 inches (35 cm) to 19 inches
     - fusing of the fontanelles by 18 months to two years
     - brain reaches 80% of the size of an adult brain by 24 months
     - strengthening of bones and muscles to support weight of body
   - Early childhood: 3–8 years
     - by three, will have all 20 primary teeth
     - walk upstairs with alternating feet
     - improved gross motor skills, e.g. hop, run, jump and kick a ball
     - improved fine motor skills, e.g. cutting with scissors and writing
   - Adolescence: 9–18 years (puberty)
     - a time of rapid growth spurts
     - pituitary gland secretes hormones that sta[illegible]p[illegible]ica[illegible]and sexual changes i
     - in boys: production of t[illegible]ste[illegible]one, causing penis and testicles prod[illegible]n [illegible]perm
       [illegible]owt[illegible]f facial, underarm and pubic hair
       [illegible]oice drops
     - [illegible]ls: production of oestrogen in the ovaries, starting ovulat growth of underarm and pubic hair
       breasts develop
       hips broaden
       adult height achieved around the age of 18

- Early adulthood: 19–45 years
  - reaches full physical maturity
  - boys reach their full adult height around the age of 20
  - pregnancy
  - perimenopause
  - neurons in the brain start to die off
- Middle adulthood: 46–65 years
  - signs of ageing (greying hair, losing hair, wrinkles)
  - presbyobia
  - hearing loss
  - drop in oestrogen levels – menopause
  - height
  - decrease in bone density
- Late adulthood: over 66 years
  - osteoporosis
  - deterioration in muscle strength
  - deterioration in hearing, vision, memory and problem-solving skills
  - deterioration in immune system

A2: Intellectual development across the life stages

1. Certain areas of the brain are associated with particular functions. Which area is ass
   - Cerebellum – posture, balance, coordination
   - Cerebrum – centre for higher learning, information processing and cognitive fu
   - Parietal lobe – proprioceptive movement, posture
   - Temporal lobe – hearing, memory, speech
   - Occipital lobe – vision
   - Frontal lobe – communication, problem-solving, reasoning, planning
   - Brainstem – heartbeat, breathing

2. What is a synaptic pathway and why is it important?
   - A gap (the synapse) between neurons that allows chemical messages to be sent
     Repetition of the same, establishes memory.

3. What are Piaget's four stages of learning and development, and at what age do they
   - Sensorimotor (0–2), preoperational (2–7), concrete operational (7–11) and form

4. What is object permanence, and when do infants understand this concept?
   - Object permanence is the ability to understand that something is there, even th
     develops in children around the age of nine months.

5. What does Piaget's constructionist theory teach us about the term 'conservation', ar
   this concept?
   - Conservation is the ability to understand that something remains the same ever
     volume of water in a different shaped glass, same number of coins spread over
     concrete operational stage understand this concept.

6. In Piaget's theory, what does the word 'schema' mean?
   - A pattern of action and interaction that, through repetition, establishes an emb

7. What two words does Piaget use to describe the way our brain processes informatio
   - Assimilation: using existing structures and schemata to incorporate new learnin
   - Accommodation: modifying existing structures and schemata to incorporate ne

8. What does LAD mean?
   - LAD stands for Language Acquisition Device. A theory developed by Noam Cho
     how humans all acquire the ability to learn language within the first years of life
     structure solely reserved for learning language.

9. Explain what the letters ZPD mean and how this relates to Vygotsky's social-construc
   - ZPD is the Zone of Proximal Development. The ZPD is the area in which a child
     with the help of more knowledgeable adults or peers. Once the knowledge wit
     the child is able to apply that knowledge independently.

10. How many modes of thinking did Jerome Bruner identify in children, what are they a
    - Bruner identified three modes of thinking: enactive, iconi and symbolic.
      In the enactive mode, we are physically engaged in learning a task.
      In the iconic mode, we are able to create a mental image of something.
      In the symbolic mode, which is first seen at around the age of seven, thinking al
      linked to direct experience.

11. How ma[illegible] theory have psychologists identified, and what are they?
    - Th[illegible] five main types of memory:
      - episodic – specific, personal memories, e.g. what I had for dinner last nigh
      - source – how we know about something related to time and place, e.g. wh
      - flashbulb – memory related to a specific, surprising moment, e.g. winning
      - semantic – memory related to words and facts, e.g. different names of flo
      - procedural – memory related to how things are done, e.g. changing a nap

12. Why is dementia different from Alzheimer's disease?
    - Dementia is a syndrome, which refers to a range of different symptoms that tog
      condition. Alzheimer's is a chronic, progressive, life-limiting disease caused by
      and has some symptoms similar to dementia.

A3: Emotional development across the life stages

1. Which hormone is associated with stress and toxic stress?
   - Cortisol

2. What is toxic stress and how does it affect babies?
   - Toxic stress occurs when the levels of cortisol remain high for a sustained period.
     positive nurturing by parents or caregivers. Toxic stress affects brain developme
     with fear, anxiety, withdrawal and loss will strengthen, rather than those associat

3. What c[illegible] Bowlby call his theory on mother–child relationships, and what is the
   - Attachment theory. Children enter the world biologically preprogrammed to fo
     part of an infant's basic survival mechanisms, on a level with the innate reflexes
     reinforces the need to stay close to the mother.

4. What are the four stages in Bowlby's theory?
   - The pre-attachment phase, 0–3 months. Infants cry in order to draw the attent
     recognises. The soothing and caring reaction of the caregiver gives rise to a fee
   - The indiscriminate attachment phase, 3–7 months. Infants recognise they have
     show a preference for the main caregiver.
   - The discriminate attachment phase, 7–9 months. Infants are strongly attached
     show emotional distress and anxiety when they are separated.
   - The multiple attachment phase, 9 months and over. Infants can have strong an
     caregivers.

5. Mary Ainsworth's research into attachment theo[illegible]he[illegible]o devise the 'Strange Situ
   parts of the actual task?
   - 1. Caregiver and infant[illegible]the room where the experiment will take
     2. Caregiver a[illegible]e into the room and are alone for a while.
     3. [illegible]ng[illegible]s into the room and joins the caregiver and infant.
     4. [illegible]giver leaves the room, leaving the infant alone with the stranger.
     5. [illegible]egiver comes back and stranger leaves the room.
     6. Caregiver leaves the room so the child is completely alone.
     7. Stranger comes back into the room, so it is just the stranger and the infant
     8. Caregiver comes back into the room and stranger leaves.

6. What relationship types between parent or caregiver and infant did Mary Ainsworth task?
   - Three main relationship types: secure, anxious-avoidant and anxious-resistant (
     - In secure relationships the child happily explores while the caregiver is the happy when they return. They avoid the stranger but will approach when
     - In anxious-avoidant relationships the child is not interested in the toys and caregiver leaves or returns. They also avoid the stranger.
     - In anxious-resistant or ambivalent relationships the child is unwilling to ex distressed when the caregiver leaves. Upon return the child will move clos themselves to be cuddled or soothed. They show fear of the stranger.
     - Disorganised/disoriented: this category was added later and describes and room apparently disorientated, they cry when the parent leaves and will hav or hit themselves. Such children have often experienced se

7. What the main temperament characteristics did Thomas and Chess identify?
   - Easy, slow and difficult to warm up
     - Easy babies generally adapt well, are happy, easy to soothe and feed and s
     - Difficult babies are harder to settle and less happy, they cry more, sleep le
     - Slow to warm up babies do not show their emotions and take time to adap once they have adapted they are generally happy.

8. Name the two ways in which poverty can be measured.
   - As a percentage (currently 60%) of median income or as a measure of deprivati can buy). Current UK Government uses the median income measure.

9. How is attachment affected by relationships?
   - Some of the interactions in relationships that affect attachment are governed b
     - parenting style: authoritarian, authoritative, permissive, uninvolved
     - child's reaction to parenting style: conformity, non-intervention, wearing the (conforming while slamming doors, sharing), negotiating, arguing, bargai e.g. either go out, or play Xbox), accompli (just do it anyway and risk th (attacking parents physically)
     - temperament: easy, difficult and slow to warm up – nine temperament tra level, regularity, intensity, regularity, sensory threshold, approach/wit mood)
     - 'goodness of fit'

10. How is attachment affected by poverty, social exclusion, addiction and mental healt
    - Poverty: absent or uninvolved parenting, guilt and stress at not being able to pr crowded housing (no privacy, fear of neighbours/neighbourhood, damp, unhea models, no safe space to play or feel secure
    - Social exclusion: peripatetic lifestyle, mistrust of state institutions, adult level of (social services will not visit), access to information about services, transport av and cultural choices, unemployment and disability. Positive choice for certain g independent lifestyle and culture
    - Addiction: psychological issues, e.g. aggression and paranoia, social exclusion a on family caused by addiction (parenting, financial, housing), social and emotio to drug addicts suffering withdrawal symptoms during first months)
    - Mental health: parenting issues and finding childcare difficult or overwhelming, to appropriate help, children become the caregiver for the parent(s), stress an early adulthood, children in care and the effects of trauma on mental health (families), unemployment and poverty

11. What is the difference between temperament and personality?
    - Temperament is something we are born with, an innate biological trait providin that influence personality development.
    - Personality builds on temperament and is influenced by social, cultural and env the canvas on which personality is painted.

12. How do Erikson's eight Stages of Psychosocial Development inform us about perso
    - At each stage we encounter a crisis that can have a positive or negative outcom relationships and interactions. How we react to each crisis and how we emerge social influences, relationships and interactions. Each stage influences and co not complete a stage successfully by resolving the crisis, the damage to our per our lives. The ages given to each stage are approximate, particularly during the marriage, work, having children, etc. can happen across a wider time frame tha

13. What five core personality traits have been identified by psychologists?
    - Openness, conscientiousness, extraversion, agreeableness, neuroticism, or OCE

14. 'Self-concept' is an umbrella term for what three things; what are they?
    - Ideal self: is an internal idea of what we would like to be.
    - Self-image: is our actual self and how we define ourselves (by gender, work, rel
    - Self-esteem: is how positive we feel about ourselves. If we have high levels of s optimistic and do not worry about what other people think.

15. How does self-concept begin in babies?
    - Through imitation and initiating reactions (from animate and inanimate objects
    - Through receiving love and affection that does not have to be earned from par

16. What affects self-concept, particularly in early childhood, adolescence and early adu
    - The way you categorise yourself
    - Feedback from others
    - Self-attribution
    - Peer pressure
    - Wish to conform
    - Multiple identities

17. Charles Cooley's looking-glass theory has three parts; what are they?
    - First, we imagine how we seem to others.
    - Second, we react in a way that we think mirrors that judgement.
    - Third, we use other people's judgements to develop our self-image.

18. What external factors can have a negative effect on self-esteem?
    - Home and family relationships
    - Educational attainment
    - Social media
    - Criticism and pejorative comments
    - Abuse
    - Life events
    - Attainment
    - Popularity
    - Disability and other m

19. What are Piaget's stages of moral development?
    - 0–4 Pre-moral: the child is egotistical, discovering the effect of their actions on them
    - 4–11 Moral realism: two stages: first (4–7 years) understanding the concept of understanding the concept of fairness and justice
    - 11+ Moral relativism: understanding that everyone cannot be treated in the sa

20. Why do Kohlberg's stages of moral development only start at the age of six?
    - Before that age Kohlberg considered children to be amoral and unable to have

21. What are the different stages of moral development according to Kohlberg?
    1. Pre-conventional (6–13 years): subdivided into substage 1: Understanding puni done something wrong; and substage 2: Understanding rewards and praise hap right
    2. Conventional (13–16 years): subdivided into substage 3: Conformity—wish to p 'g [illegible] and substage 4: Keen to obey rules and do what is expected
    3. Post-conventional (16–20+ years): subdivided into substage 5: Prepared to brea morally or legally 'wrong'; and substage 6: Possess strong morals, ethics and pri by society

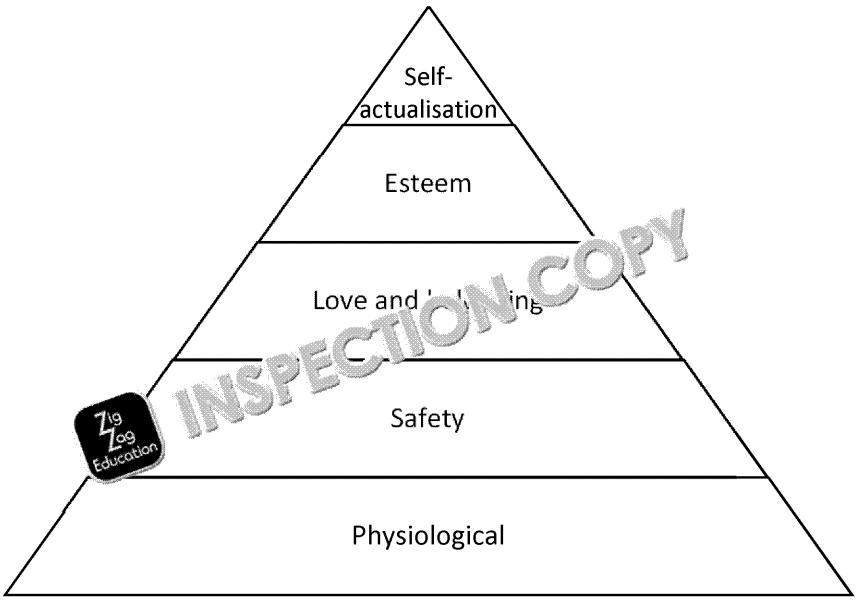
A4: Social development across the life stages

1. Give as many reasons as you can think of for why play is important.
   - Provides sensory stimulation that supports the development of neural pathway
   - Provides the foundation blocks for fine and gross motor skills development
   - Provides an avenue for imagination and creativity
   - Allows you to engage with something repeatedly, fine-honing skills and ensurin progressing to more complex tasks
   - Allows you to be curious, to think 'what if?'
   - Allows you to be inventive, developing problem-solving skills
   - Allows you to develop social skills including sharing, collaboration, cooperation feelings of others
   - Requires an ability to communicate, prompting the development of language o
   - Provides a basis for social interaction and the development of friendship and fri
   - Provides a platform on which we can build skills in self-regulation, courtesy and
   - Allows children to develop an understanding of rules and how to share
   - Allows children to investigate difficult themes, such as death

2. What are Mildred Parten's six stages of play?
   - Unoccupied: Children are not playing with anything or watching anyone.
   - Onlooker: Children watch each other play, and may interact socially, but do not
   - Solitary: Children play by themselves with no input from others.
   - Parallel: Children play alongside each other, sometimes copying each other.
   - Associative: Children are playing together but their play is uncoordinated and th
   - Cooperative: Children interact and play together without adult support

3. What do the following terms referring to play mean: free-flow play, structured play, adult-directed play and child-initiated play?
   - Free-flow play: sustained play where children are free to explore, select and use indoors and outdoors, as they like, without interruption
   - Structured play: play that has been organised and planned for by more knowled initiated play and adult-directed play usually with a pre-agreed learning intenti
   - Adult-initiated play: play which may or may not be preplanned, but which is bas interests and provision of appropriate resources or provocations that children c and the adult independently
   - Adult-directed play: play which may or may not be preplanned, but which is bas interests and provision of appropriate resources or provocations that require gr from an adult than adult-initiated play
   - Child-initiated play: sustained play that has been initiated and continued by the

4. Draw and label a picture of Maslow's Hierarchy of Needs.



5. What are the social benefits of having a friendship group?
   - Stay mentally healthy, motivating us to connect, do better or help others
   - Communicate ideas, needs, cultural beliefs and social values
   - Provide a support system, e.g. drug rehabilitation, new-born baby, bereaveme
   - Promote a cause or express personal beliefs, whether as a protest or in a profe
   - Feel positive and happy (research shows that socially engaged adults age bette
   - Achieve goals such as weightloss or running a marathon

6. What can be the negative results of social interaction?
   - Lower levels of self-esteem, e.g. if a person is ostracised from a group be pressure)
   - Fear – fear of being found out, fear of letting other people d
   - Anger and aggression – often a defensive reaction linked to fear
   - Bullying – intimidation and violence – carried out by you on those you can domi partners, pets)
   - Depression – loss of love and a feeling of belonging, low feelings of self-worth a to move on or away from the negative behaviour
   - Feelings of helplessness – inability to change the situation, such as move job, o
   - Physical reactions – migraines, stomach cramps
   - Stress – although stress can have a positive effect, raising concentration levels, it can also have negative effects, such as weight gain, affect sleep patterns and
   - Obligation – feeling obliged to join the group so as to be part of something and

7. Name Bronfenbrenner's different circles of influence in his Ecological Systems theor represents.
   - Micro – family
   - Meso – local school, neighbours, shops
   - Exo – parent's workplace, church
   - Macro – government policies and decisions, cultural beliefs
   - Chrono – historical events

8. What is the equation for Social Exchange Theory?
   - Worth = Reward – Cost

9. Explain Theory of Mind.
   - The ability to mentally represent and understand from behaviour or body langu

10. Provide one example of how we gain independence for each life stage.
    - Infancy: communicating needs and wants, undressing, learning to crawl, walk a
    - Early childhood: going to playgroup and school, having school friends, walking
    - Adolescence: going to secondary school and/or sixth form college, having a wee motorbike) and romantic relationships
    - Early adulthood: leaving home, going to university, working full-time, getting m
    - Middle adulthood: children leave home, more time for hobbies, interests and le
    - Late adulthood: may still take part in social groups and hobbies, but there will b physical or medical needs

B1: The nature/nurture debate

1. What is the difference between nature and nurture?
   - Nature: development shaped by inherited predispositions; also known a
   - Nurture: development shaped by appropriate educational environments and re Behaviourist

2. What does Locke mean by 'tabula rasa'?
   - Phrase coined by John Locke (1632–1704) which means a blank slate. Essentiall knowledge or ability, so it is the responsibility of the parents and greater comm

3. What are the four deficiency levels in Maslow's Hierarchy of Needs?
   - Physiological
   - Safety
   - Love and belonging
   - Esteem

4. How does each level in Maslow's Hierarchy of Needs have a positive or negative effe

Layer	Positives for growth and development	Negati
Physiological	Nutritious food Ability to keep warm or cool Safe and comfortable shelter Clean drinking water Good sanitation	Lack of fo Unable to Unsafe dr Unsafe or Poor sani Poor heal
Safety	Good econo[illegible]ances Tole[illegible] [illegible]n Personal and familial security Respect of others and property Care of others within framework of society	Poverty War, pers Family br Abuse, ne Lack of re Violence a
Love and belonging	Family support Friendship Secure attachments Self-worth Dignity Confidence Love and intimacy	Low self-e Bullying Fear and i Lack of su Depressio Isolation a
Esteem	High feelings of self-worth and self-esteem Dignity Education Confidence	Low feeli Poor self- Loss of sk Feeling ur Mental he
Self-actualisation	High morals Creative Open-mindedness Tolerance and a[illegible]ot[illegible]nce	Immoralit Destructi Bullying a Hatred an

5. What does Maslow mean by 'self-actualisation'?
   - Realising one's [illegible]otential

6. In Maslow's [illegible]tivation Model, what skills or areas do the terms 'cognitive needs', 'a
cover?
   - Cognitive needs: learning, education and understanding
   - Aesthetic needs: the need for creativity and beauty
   - Transcendence: giving back to society by helping others achieve their full poten

7. What is Gesell's Maturational Theory of Development?
   - Physiological and behavioural development occur in a fixed sequence (which is
   womb and continuing throughout early childhood and adolescence. Developm
   and genetic traits.

8. Who developed the ideas behind Social Learning theory, and how would you define
   - Albert Bandura (1925–)
   - We learn more from imitating what others do rathe[illegible]from rewards and pu
   innate structures (nativist model).

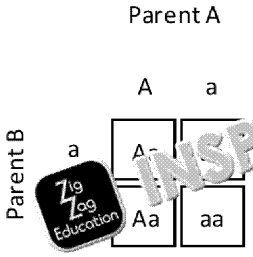
9. What are Bandura's four stages [illegible]ional learning?
   1. Attention: Child A [illegible]adult comfort a child.
   2. Retention: [illegible]A [illegible]imilates and accommodates the information.
   3. M[illegible]pro[illegible]action: Child A tries to comfort a child.
   4. Mo[illegible]n: If they are praised, they feel successful, adding to levels of self-este

10. What is the stress–diathesis model?
    - The stress–diathesis model considers how a genetic or biological predisposition
    triggered by certain stressors (personal, environmental, genetic, biological, phy
    mechanisms or social network can reduce our vulnerability to illnesses that are

B2: Genetic factors that affect development

1. What is the difference between a chromosome and a gene?
   - A chromosome is a ribbon-like structure composed of many genes.
   - A gene is a section of DNA which carries the code for a particular protein provid

2. Create a Punnett square to show the birth outcomes for two parents where one pare and the other is a carrier.



   - This shows that there is a 50% chance that they will have children who carry the that they will have children who have the disease.

3. What does the term 'congenital defect' mean?
   - The term 'congenital defect' is used to describe all forms of physical or metabol the womb.

4. What factors can cause congenital defects?
   - Genetic
   - Chromosomal
   - Gene mutation
   - Mitochondrial
   - Biological
   - Environmental

5. What is the difference between a genetic disorder and a genetic mutation disorder?
   - A genetic disorder occurs when a child inherits rece[illegible]enes from both parer
   - A genetic mutation disorder occurs because [illegible]tion within the genetic st parent.
   - Genetic disorder: Duchen[illegible]dystrophy, PKU, Huntingdon's disease
   - Gene mutation di[illegible]ondroplasia, Behçets disease, cancer

6. What c[illegible]own's syndrome?
   - Cau[illegible]by the presence of an extra chromosome (number 21)

7. What are mitochondria and what are some of the diseases associated with faulty mit
   - Mitochondria are the powerhouses of each cell in the body, converting fats and Syndrome (KSS), Leigh syndrome and maternally inherited Leigh syndrome (MIL syndrome (MDS), Pearson syndrome, Leber's Hereditary Optic Neuropathy

8. What are Addison's disease and diabetes caused by?
   - Addison's disease: failure of the adrenal gland
   - Diabetes: failure of the body to produce insulin responsible for processing suga This is not the same as Type 2 diabetes.

9. What biological factors can affect a baby in the womb?
   - Excessive intake of alcohol during pregnancy
   - Intake of and addiction to drugs or othe[illegible]n during pregnancy
   - Difficult or premature birth
   - Oxygen starvation at bi[illegible]
   - Lack of a nutriti[illegible]et either before or during pregnancy
   - G[illegible]me[illegible]s infection
   - Ch[illegible]x infection
   - Infection from mosquito bite

B3: Environmental factors that affect growth and development

1. What types of environmental factor can affect growth and development?
   - Pollution: air, water, soil, noise, light
   - Substandard living conditions
   - Unsafe enviro
   - Compromised

2. How can air pollution affect development?
   - Illness – allergy, asthma, CVD and respiratory diseases
   - Poor attendance at school or work due to illness [illegible] education or promot
   - Side effects of some medication – drowsiness, stunted physical growth

3. What situations might cause water to become polluted or contaminated in the UK?
   - Poor farming practices and water run-off from farm land
   - In[illegible]ac[illegible]/pollution
   - Fl[illegible]
   - Breakdown in
   - Building on co

4. How can soil pollution affect growth and development?
   - Affects farmers if they are no longer able to farm the land – loss of income
   - Affects health and possibly growth if contaminants come into food chain
   - Increase in congenital birth defects

5. Why is noise pollution a problem for growth and cognitive development?
   - Raises cortisol levels, leading to chronic stress
   - Lack of sleep causes tiredness and irritability, affecting ability to concentrate
   - Affects relationships
   - Causes deafness

6. How does light pollution affect growth and development?
   - Affects circadian rhythm so we feel tired or awake at the wrong time
   - Lack of sleep causes tiredness and irritability affe[illegible]ability to concentrate, le
   - Can cause Seasonal Affective Disorder (SAD

7. What is melatonin?
   - Melatonin is a [illegible]roduced by the pineal gland, located in the brain. Pro
     ca[illegible]to be sleepy, while natural light inhibits production so melatonin lev

8. How can substandard living conditions affect growth and development?
   - Cold and damp conditions lead to mould growth – causes health problems such
     allergies and possibly CVD
   - Loss of days at school or work due to illness or having to move frequently
   - Social isolation and self-esteem – feel unable to have friends or family visit, ash
   - Vermin (rat, mouse or cockroach) infestations are health hazards
   - Inability to heat the room or house can cause hypothermia, especially in infants
     hypothermia on the body are confusion, loss of mobility, death)
   - Overcrowding
   - Lack of privacy
   - Difficult for children to play, or do their homework and study
   - Guilt, anger, depression and other mental health issues
   - Homelessness and sleeping on the streets will lesser[illegible]xpectancy and make
     housing, GP surgeries, etc.

9. What is an insecure environment[illegible]ight it affect growth and development?
   - An insecure enviro[illegible]place where it is not safe to live a normal life or ca
   - Effect[illegible]f a[illegible]environment on growth and development include:
     - [illegible]rty issues – insecure housing, poor nutrition
     - [illegible]dition issues – location
     - Substance abuse issues – surrounding environment or family problems
     - Health issues – mental health, depression, disability
     - Safe spaces to play – affecting physical development
     - Low self-esteem
     - Safe space to study – affecting attainment at school or promotion at work

10. What issues might affect a person's ability to access healthcare?
    - Poverty – paying for services such as prescriptions
    - Private health insurance – ability to 'jump the queue' or have non-emergency t
    - Postcode lottery on services and medication offered by different health trusts
    - Ability to get an appointment when needed (surgery opening hours)
    - Transportation issues (cost, access to public transport, disability access)
    - Long stays in hospital (education, fear and anxiety, self-esteem, depression and
    - Language and communication problems
    - Status – asylum seekers may only access free emergency care
    - Natural disasters, war and social unrest

B4: How social factors affect growth and development; B5: How economic factors affect development; Major life events that affect development

1. What social factors affect growth and development?
    - Family relationships
    - Divorce, separation
    - Bereavement
    - Parenting style
    - Bullying
    - Mental health issues

2. How does culture affect growth and development?
    - Traditional choices, e.g. clothing, gendered expectations
    - Attachment bonds
    - Ethnic minority traditions and expectations within the family (FGM)
    - Growth and development milestones
    - Social interactions
    - Health choices
    - Religious beliefs
    - Dietary choices
    - Lifestyle choices
    - Language and communication difficulties

3. How do economic factors affect growth and development?
    - Life expectancy and access to healthcare and education
    - Lifestyle and health campaigns and advertising
    - Poverty, poor nutrition, housing, clothing and ability to access services
    - Debt
    - Low-income jobs with little or no security or pension rights

4. What are the effects of education on growth and development?
    - Higher average income over a lifetime
    - Efficient and productive workforce that encourages companies to invest
    - Higher production, leads to higher taxes and more money to invest in schools, e
    - Development of non-cognitive skills such as honesty, perseverance, reliability, p
    - Lower birth rates and healthier children

5. What would be considered as unhealthy lifestyle choices?
    - Little or no exercise
    - Unhealthy food high in fats and sugars
    - Smoking
    - Drugs
    - Alcohol
    - Risk-taking behaviour

6. How does the environment where we live affect physical, cognitive and social and em
    - Physical development: access to health services and professionals
    - Cognitive development: access to education
    - Social and emotional development: access to clubs and groups, and other servic
      children to play

7. What types of event can be considered predictable and unpredictable?

Predictable life event	Unpredicta
• Pregnancy and birth	• Chronic illness (physical or
• Marriage	• Separation and divorce
• Going to nursery or school	• Sudden death of a loved o
• Going to university	• Personal accident
• Leaving home	• B[illegible] fired from a job / rec
• Moving house	• [illegible]ospitalisation
• Starting employment	• Seeing or experiencing a tr
• Getting a promotion	• War
• Giving a speech	• Disability (due to accident,
• Getting engaged	• Abuse (physical, sexual, ne
• [illegible]er	• Sudden change of home or

8. What factors may affect your reaction to the stress of change?
   - Age
   - Time of life
   - Experience
   - Responsibilities
   - Health
   - Level of control

9. What does the Holmes-Rahe scale measure?
   - The impact of stressful life events on health. There are two scales, one for adul

10. What factors affect mental health?
    - Family dynamics
    - Unemployment
    - Poverty and debt
    - Education
    - Physical health
    - Social contact (neighb
    - Stress (parenting, deb

11. What factors influence becoming independent?
    - Stable relationships
    - Positive self-concept
    - Education
    - Media (expectations [illegible]rming or not conforming to norms)
    - Cultural and [illegible]ectations (influence of religious or secular belief systems
    - W[illegible]l lifestyle

C1: The physical changes of ageing

1. What is the difference between primary ageing and secondary ageing?
   - Primary ageing: changes that occur as the body ages, e.g. wrinkles, shrinkage of ca
   - Secondary ageing: changes that occur due to disease, illness, chronic condition

2. What is atherosclerosis, and which other heart problems is it connected with?
   - Atherosclerosis is the build-up of fatty deposits (atheroma) in the arteries suppl muscle, which may be caused by high cholesterol levels, smoking, diabetes or h
   - Atherosclerosis is linked to angina (dull ache in torso, arms and stomach) and m

3. What is the difference between ischaemic stroke, haemorrhagic stroke and transient
   - Ischaemic stroke – blockages in the blood supply to the brain
   - Haemorrhagic stroke – burst blood vessels in the brain
   - Transient ischaemic attacks (TIAs) – small, tempo[illegible]lo[illegible]kages in the brain

4. What factors are involved in a person's [illegible]position to CVD and stroke?
   - High cholesterol
   - Diet high in fats [illegible]t
   - Sm[illegible]
   - H[illegible]ol intake
   - Ob[illegible]
   - Insulin resistance and diabetes
   - High blood pressure (caused by hardening or narrowing of the arteries)
   - Lack of exercise or sedentary lifestyle
   - Family history
   - Ethnicity (statistics show that South Asian, African and Caribbean people have a

5. What health effects are associated with CVD?
   - Shortness of breath
   - Pain in the chest, upper abdomen, back, neck, jaw and throat
   - Fainting attacks
   - Weakness
   - Coldness
   - Sweating

6. What is the difference between the degenerative nervous system diseases of multipl
   disease (MND) and myalgic encephalomyelitis (ME)?
   - MS – chronic disease where the myelin sheaths of the nerves are gradually dest
     childhood to middle adulthood. MS affects the quality of life (weakness, fatigue
     ar[illegible] is not life-limiting or fatal. Cause unknown.
   - M[illegible]ronic, progressive disease that affects nerves in the brain and spinal c
     weakness in muscles and will affect the way you walk, talk, eat, etc. Life-limitin
     late adulthood. Cause unknown although one form of MND may have genetic r
   - ME or chronic fatigue syndrome (CFS) – chronic fatigue which may disappear, o
     viral infection. Cause unknown. Affects individuals of all ages. ME is not life-li
     symptoms affect relationships, study at school, or keeping a job, etc.

7. At what stage of life might one get Parkinson's disease and what are the causes and
   - Middle to late adulthood (after 60). Chronic, progressive neurological conditio
     that produce dopamine. Cause unknown. Symptoms: causes tremor, rigidity o
     walk with a shuffling gait, and problems with speaking (aphasia) and swallowin

8. What is the difference between aphasia and dysphagia?
   - Aphasia is difficulty in finding the correct word, or mixing up words and phrases
     understanding what others are saying to you.
   - Dysphagia is problems in swallowing.

9. What is the difference between the cau[illegible]bromyalgia and polymyalgia rheumat
   - Fibromyalgia – caused by [illegible] nervous system becoming oversensitive to
   - Polymyalgia rheu[illegible] – caused by inflammation of the muscles and nerves in

10. What p[illegible]s might a person with osteoarthritis face?
    - Pai[illegible] stiffness in joints
    - Inability to grip
    - Inability to support weight when standing or walking

11. Is rheumatoid arthritis the same as osteoarthritis?
    - No. RA is an autoimmune condition. OA is a degenerative condition. Both affe

12. What are the most common sight-related degenerative conditions, and how do they
    - Presbyopia – inability to focus on nearby objects
    - Macular degeneration – impairment of the macular, affecting how we see faces
    - Cataracts – lens of the eye becomes opaque, affecting sight
    - Glaucoma – blockage between the cornea and the lens, preventing the watery f
      can lead to blindness

13. How can loss of taste affect quality of life?
    - Enjoy food less
    - Eat less (malnutrition) [illegible]ding to frailty and susceptibility to infections
    - Overuse of s[illegible]lt [illegible]o other flavour enhancers

14. What a[illegible]mia and hyposmia, and how might they be caused?
    - Anosmia – complete loss of sense of smell
    - Hyposmia – partial loss of sense of smell
    - Causes: smoking, medication, chronic rhinitis, Alzheimer's, dementia, nasal po

15. Does our sense of touch change as we get older?
    - Yes. Degeneration of nerve sensors in the skin makes it more difficult to judge differences, affecting dexterity and balance, but not the recognition of texture.

16. What is tinnitus?
    - Ringing or buzzing in the ears caused by damage to the hair cells in the inner ea damaged

17. What is the proprioceptive sense?
    - To do with personal spatial awareness, weight bearing and body functions (hun

18. What factors can affect the vestibular and proprioceptive senses?
    - Medication, ear infections, muscular and nerve degeneration, intake of al

19. Why might the elderly people suffer from poor nutrition?
    - Loss of appetite due to loss of senses of taste and smell
    - Problem with teeth and dentures
    - Inability to shop or cook for themselves
    - Poverty
    - Digestion and inability of the body to absorb nutrients

20. What are the four main types of dementia?
    - Alzheimer's disease
    - Vascular dementia
    - Dementia with Lewy bo
    - Frontotemporal demen

21. What is the prognosis for someone diagnosed with Alzheimer's disease?
    - 6–12 years

22. What are the general symptoms of dementia?
    - Memory loss
    - Confusion
    - Difficulty organising and planning
    - Forgetfulness
    - Difficulty in finding the right word
    - Difficulty managing simple daily tasks
    - Loss of independence
    - Inability to sleep
    - Changes in mood
    - Depression
    - Frustration and some

23. What is Alzheimer's disease?
    - Chronic, degenerative, life-limiting disease named after Alois Alzheimer, who di 1900s; is the most common form of dementia. Linked to genetic mutations wh brain and may be inherited. Alzheimer's disease is usually diagnosed in patient can occur in people as young as 45. It is not known what causes Alzheimer's bu brain injuries (e.g. car crash or boxing), and lifestyle factors (smoking and cardi

C2: The psychological changes of ageing; C3: The effects on society of an ageing

1. How can ageing affect our self-esteem?
    - Retirement and the ensuing loss of job, work-related connections and feelings
    - Poverty or financial worries that mean we cannot afford to socialise, and becom
    - Financial problems leading to the sale of the family home, moving to accommo
    - Isolation due to health problems, inability to keep up with technology, loss of fr
    - Body image – grey or thinning hair, wrinkles, dementia, self-esteem and se
    - Regrets if life has not gone the way you would have wished, and feelings of hav

2. What kinds of social changes might be experience in late adulthood?
    - Role changes
    - Loss of partner
    - Loss of friends
    - Increase in leisure tim

3. How can financial concerns affect the quality of life in late adulthood?
    - Fear of losing your home and having to move
    - Less money to buy nutritious food
    - Not enough money to pay for utilities (heating, lighting, cooking, water) and re
    - Not enough money to run a car/dependence on public transport which may be

4. How might culture or religion and beliefs affect the quality of life in late adulthood?
   - Strong social networks support healthy self-image and sense of well-being.
   - In some cultures, it is usual for three generations to live in the same house and

5. Which three theories seek to explain successful ageing?
   - Social Disengagement theory, Activity theory and the Continuity theory of ageir

6. What are the main premises of Social Disengagement the[illegible]?
   - Social expectation that older people disengage from society in return for having
   - Two-way process – if one side does not disengage then the process is unsucces
   - Regression to the dependency of childhood due to physical, physiological and p

7. What fac[illegible] might influence how or if an individual disengages from society?
   - cu[illegible]pectations
   - hea[illegible]
   - financial status
   - environment they are living in
   - personal circumstances (loss or illness of spouse, dependent children or grandc
   - social network

8. What is the main proposal behind Activity theory?
   - Successful ageing is dependent upon a person continuing to be an active partici

9. How does Continuity theory of ageing differ from Activity theory and Social Disengag
   - Late adulthood is not a separate part of life.
   - Successful ageing is linked to embracing the ageing process and the life changes
   - Changes in lifestyle are minimal and happen gradually.

10. How does an ageing population affect society?
    - Cost
    - Pressure on health services
    - Pressure to maintain an inde[illegible]ent lifestyle
    - Pressure on other s[illegible] such as home care, meals on wheels, transport servi
    - Pressure on [illegible] friends and neighbours to provide a solid social support net

11. What fa[illegible]ght negatively influence ageing, and make it a less successful experie
    - Income
    - Health
    - Disability
    - Mental health
    - Isolation in rural areas
    - Substandard housing
    - Poor nutrition
    - Poor education
    - Abuse
    - Trauma and loss
    - Substance dependency and abuse
    - Cultural and religious differences
    - Communication difficulties (aphasia

12. What was the life expectancy in the UK for men and women in 1901, and what is it n
    - In 1901 it was 45 years for men and 49 years for women. In 2015 it was 78.8 fo

13. Why is life expectancy increasing?
    - Better food supply and nutrition
    - Better access to medication, GP and hospital services
    - Better education i
    - Better hygiene an

14. What are the main economic ch[illegible] associated with an increase in life expectanc
    - Cost of healthcare [illegible], operations, mobility aids, etc.
    - Provi[illegible] s[illegible] all who need them, not just those in greatest need
    - E[illegible] people remain able to take part in society and maintain social networ
    - Pro[illegible] transport
    - Providing financial support so the elderly can maintain a relatively independent
    - Providing residential care that is cost-effective (use of top-up fees)
    - Ensuring that appropriate services are available so they can leave hospital after convalescence home or receive home help for the time required (not bed-block
    - Pension payments – ensuring those who do not wish to retire can continue wor

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