

Developmental Psychology Notes

I. To what extent do biological, cognitive and socio-cultural factors influence human development?

(Gender Role Formation)

Biological factors	Cognitive factors	Socio-cultural factors
<p>The biological approach assumes <i>gender</i> differences are a result of sex differences in biological processes (ie. Chromosomes and hormone secretion). It is these differences in brain development, and the differences in brain activity that cause men to behave differently from women and thus assume different roles</p>	<p>Gender schema theory is based on the assumption argue that early cognitive processes play a key role in gender development.</p> <p>Children form cognitive schemas about gender as soon as they discover and are able to categorise their own sex.</p> <p>The establishment of this basic <i>gender identity</i> (2-3 years) motivates children to learn about the sexes and start building a gender schema.</p>	<p>Research seems to lend weight to arguments that gender role is universal, and therefore possibly biological. But some research suggests that gender roles are a learned phenomena, and that culture is the socializing agent</p> <p>Cross- cultural studies such as Mead's (1932) with different tribes in Papua New Guinea show that typical masculine and feminine behaviors applied to both genders. Though it is important to remember this study is an example of imposed etic, applying western descriptions of gender to non-western cultures.</p>
<p>It is clear from a range of studies involving humans and other animals that chromosomal and hormonal differences between males and females affect a range of masculine and feminine behaviours, which supports the biological view. This is clearly shown in the case of Bruce/Brenda (later, David) Reimer in which a biological boy raised as a girl always felt like a boy, and went on to have surgery to revert back to being a boy.</p> <p>The biological view of gender is supported by those cross-cultural studies that have found universal features of gender. But Mead's study shows that labour division is not the same in all cultures, thus challenging the view that gender roles are innate (biological) and universal</p> <p>However, much of this research is correlational. Consequently, whilst it indicates a relationship between, for example, testosterone levels and risk taking, it does not indicate the direction of causality. Whilst higher testosterone might cause people to make riskier decisions, it might also be that the process of taking risks causes testosterone levels to rise.</p>	<p>Support for this comes from the study by Martin & Halvorsen (1983) .</p> <p>However, it is not clear why gender schemas develop and take the form that they do</p>	<p>The role of culture can also be seen in the changes in gender roles over the last 50 years. In western cultures women have steadily entered the labour market, and whilst there still exist specific gender roles (still more men are plumbers and engineers, and women primary schoolteachers and nurses) gender roles are slowly converging. Women occupy positions of power, are firefighters and soldiers (although they still can't fight on the frontline), men are becoming homemakers, nurses and child carers.</p> <p>A research study by Renicke (2006) revealed that young Danish fathers believe it is important for them to have close contact with their baby and take part in caring for the child. This clearly supports Mead's argument that gender role differences reflect cultural norms and expectations</p>

II. Evaluate psychological research (that is, theories and/or studies)

relevant to developmental psychology (Piaget's Theory of Cognitive Development)

- **Piaget's impact on psychology**
- Piaget founded the discipline we know as 'cognitive development'. He applied the philosophy of constructivism to the way children learn. They construct new knowledge by adapting knowledge to fit their schemas. In this way he also emphasized the role of the environment as well as biological factors. Classrooms now aim to provide stimulating environments in which children can construct knowledge.

- His theories have received a lot of support over many years, and whilst his theories have been subject to modification and criticism many fundamental aspects of his theories are still accepted as valid and relevant.
- **Methodology**
- Many of these criticisms concern his research methods. Piaget studied his own children and the children of his colleagues in Geneva in order to deduce general principles about the intellectual development of all children.
- Not only was his sample very small, but it was composed solely of European children from families of high socio-economic status. Researchers have therefore questioned the generalizability of his data.
- He used the term clinical interview to do his research. This took the form of an open ended conversational technique for testing children's understanding of certain tasks. Although clinical interviews allow the researcher to explore data in more depth, the interpretation of the interviewer may be biased.
- At the same time children may not understand the question/s, they have short attention spans, they cannot express themselves very well and may be trying to please the experimenter. Such methods meant that Piaget may have formed inaccurate conclusions.
- **Competence Vs. Performance (over-under estimates)**
- Piaget failed to distinguish between competence (what a child is capable of doing) and performance (what a child can show when given a particular task). When tasks were altered, performance (and therefore competence) was affected.
- Therefore Piaget may have underestimated children's cognitive abilities. For example a child might have object permanence (competence) but still not be able to search for objects (performance). When Piaget hid objects from babies he found that it wasn't till after 9 months that they looked for it.
- While Piaget relied on manual search methods – whether the child was looking for the object or not later research such as **Baillargeon and Devos (1991)**, reported that infants as young as 4 months looked longer at a moving carrot that didn't do what it expected, suggesting they had some sense of permanence, otherwise they wouldn't have had any expectation of what it should or shouldn't do.
- A further example is that of 'egocentrism'. Egocentrism is the inability to see things from another's perspective. In Piaget's three-mountains task children up to aged nine were unable to describe a mountain-top scene from another doll's perspective.

- **Hughes (1975)** argued that the task was both unrealistic (mountain scene) and unmanageable (picking out photos). He tested egocentrism using a model of two intersecting walls, a doll of a little boy and two 'policeman' dolls and the child is asked to hide the doll where neither of the policemen can see him. Hughes found that pre-school children selected a correct hiding place for the boy 90% of the time. Even the youngest 122 children in the sample (3 ½ -4 years) got it right 88% of the time. This suggested young children are able to see things from another's perspective.
- Similarly, Piaget found that conservation tasks, such as conservation of volume (liquid) was hard for children under the age of 7. However subsequent research, such as that by **Samuel & Bryant (1984)** found that children below that age of 7 were able to conserve. They argued that Piaget's pre-transformation question unwittingly forced children to give the wrong answer by asking the same question post-transformation –according to the child a change of liquid must surely require a change of answer.
- **Role of social cultural factors**
- As Piaget saw children as largely independent and isolated in their construction of knowledge and understanding of the physical world he has been criticized for failing to emphasize the role of social support and culture.
- **Dasen (1994)** cites studies he conducted in remote parts of the central Australian desert with 8-14 year old Aborigines. He gave them conservation of liquid tasks and spatial awareness tasks. He found that the ability to conserve came later in the aboriginal children, between aged 10 and 13 (as opposed to between 5 and 7, with Piaget's Swiss sample).
- However, he found that spatial awareness abilities developed earlier amongst the Aboriginal children than the Swiss children. Such a study demonstrates cognitive development is not purely dependent on maturation but on cultural factors too – spatial awareness is crucial for nomadic groups of people.
- **Vygotsky**, a contemporary of Piaget argued that social interaction is crucial for cognitive development. According to Vygotsky the child's learning always occurs in a particular social context in co-operation with someone more skilful.
- This social interaction provides language opportunities, language is the foundation of thought. All children have their own ZPD's (Zone of Proximal Development) and it is only with guidance through that zone that cognitive development will occur. This is supported by studies such as **McNaughton & Leyland's** jigsaw study in which children could complete harder puzzles only when aided by their mothers.

Theory of Cognitive Development

Stage	Progress / Achievements	Limitations	Evidence for	Evidence against
sensory-motor stage (0 – 2 years)	Babies/Infants learn connections between their actions and the external world Infants understand the world only through seeing, touching, sucking, feeling, and using their senses to learn things about themselves and the environment	Babies / Infants lack object permanence	Observations on Piaget's own children	Baillargeon & DeVos (1991) Moving carrot study

pre-operational Stage (2 – 7 years)	Child starts to use symbols and words to think (representational thinking) - words - numbers - make believe play - drawing for expression	Child demonstrates; a) egocentrism <i>(this can be seen through examples of animism and artificialism)</i> b) Failure to conserve quantities (decentration & reversibility)	Three Mountain tasks Conservation tasks	Hughes (1975) Policeman Doll Study Samuel & Bryant (1984)
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concrete -operational (7 – 11 years)	<ul style="list-style-type: none"> Can use simple (concrete) logic and perform simple mental operations eg, <i>counting, measuring</i> <p>Have also acquired the skills of;</p> <ul style="list-style-type: none"> Reversibility and decentration Conservation: Seriation & Classification Concrete Transitivity (a kind of deductive logic, entertaining three concepts or relationships at the same time. 'if.....then' reasoning 	However these mental operations cannot be carried out purely in the child's head – the physical (or concrete) presence of objects is needed		<p>Dasen (1994) showed that different cultures achieved different operations at different ages depending on their cultural context</p> <p>Greenfield (1966) that schooling influenced the acquisition of such concepts as conservation</p>
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formal - operational	<ul style="list-style-type: none"> • Abstract thinking (inc. ability to follow the abstract form of if.....then 'arguments) • Scientific reasoning – (hypothetic-deductive) form hypotheses, determine how to test each one against the facts, and rule out those that prove to be wrong. • Idealistic thinking 	NONE, The child is potentially fully cognitively developed	Pendulum tasks	It is controversial whether many adults ever actually reach the formal operations stage (Connel et al, 1975)
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III. Discuss how social and environmental variables may affect cognitive development

- **Diet**
- Diet and nutrition is fast becoming a social issue as obesity rates increase in the USA and in Europe. But poor diet can also have effects on cognitive development as well as body mass. **Northstone et al (2010)** monitored 4,000 children in the UK from birth through to age 8.
- Research showed that children under the age of four who regularly ate processed food, fat and sugar had a lower intellectual performance at the age of eight and a half. According to the study the children's IQ scores fell by 1.67 for every increase on a chart reflecting the amount of processed fat in their diet
- Conversely the positive effects of a healthy diet have been well researched. **Hibbeln et al. (2007)** compared two groups of women (those consuming high levels of omega- 3 fatty acids and those consuming low levels of the same).
- They found the children of those mothers who had a low seafood intake during pregnancy had lower motor (movement and coordination) skills and lower social development and communication skills than the children of mothers who consumed high levels of seafood. **Raloff (1989)** studied 1023 6th-grade children over the course of one year and found those who were given free school breakfasts improved their math and science scores.
- **Parenting**
- In the USA, the **Michigan Department of Education (MDE, 2002)** argued that the most consistent predictors of a child's academic achievement and social adjustment were parent expectations: parents of high-achieving students set higher standards for their children's educational activities than parents of low-achieving students and this drove educational achievement and therefore cognitive development.
- The MDE stated that when parents are involved, students have:

- Higher grades, test scores and graduation rates
- Increased motivation and better self-esteem
- Better school attendance
- Lower rates of suspension
- Decreased use of drugs and alcohol
- Fewer instances of violent behavior.
- Family participation in education was twice as predictive of students' academic success as family socio-economic status; the more intensely parents were involved, the more beneficial the achievement effects. For example, children who practice reading at home with their parents, make significant gains in reading achievement compared to those who practice only at school (**Tizard et al., 1982**).
- This has wider implications, as parents who read to their children are also more likely to have more books available, take trips together as family, monitor TV watching, and provide stimulating experiences which together contribute to cognitive development.
- **Conclusion**
- **Evans & Schamberg (1994)**
- It is unlikely that social and environmental factors alone can influence cognitive development. **Schamberg & Evans (1994)** argued it is an interaction of these factors with biological factors that best explain difficulties in cognitive development.
- They tested this hypothesis by using the results of an earlier, long-term study of stress in 195 poor and middle-class Caucasian students, half male and half female. In that study, which found a direct link between poverty and stress, students' blood pressure and stress hormones were measured at 9 and 13 years old.
- In this study, earlier participants, now aged 17, had their memory tested. Working memory is considered a reliable indicator of reading, language and problem-solving ability — capacities critical for adult success. Given a sequence of items to remember, teenagers who grew up in poverty remembered an average of 8.5 items. Middle-class teenagers remembered an average of 9.44 items.
- In lab animals, stress hormones and high blood pressure are associated with reduced cell connectivity and smaller volumes in the prefrontal cortex and hippocampus. It's in these brain regions that working memory is centered. Evans and Schamberg argued that the study demonstrated that the stress associated with poverty had a negative effect on the cognitive

development of poor children. However such a study is correlational, and does not imply cause and effect.

IV. Examine attachment and its role in the subsequent formation of relationships

- **Bowlby's ethological / evolutionary theory**
- Until the 1950s, most psychologists believed that babies become attached to their primary care giver because they associate them in some way with being fed.
- However, Bowlby proposed that attachment was important not just for survival but emotional survival and protection. He argued that infants are biologically predisposed (born) to form attachments and to seek attachment figures to protect them.
- The child forms a mental representation of their first attachment relationship - which he called an internal working model. If the child internalizes a working model of attachment as secure, warm and reliable this serves as a schema for future relationships.
- Bowlby's theories had, and continue to have an enormous impact on child development, particularly in the area of parenting and social policy.
- He was influenced by the work of ethologists such as **Harlow (1962)**, noting that other species apart from humans formed attachments. In Harlow's study monkey's infant monkey's preferred to cling to a towed wire monkey, than one that dispensed food.
- This study, although now considered unethical demonstrated the importance of comfort, even to monkeys. Furthermore animal studies are hard to generalize to humans.
- According to Bowlby infants display an innate tendency to become attached to one particular individual. He called this monotropy. He suggested this tendency was qualitatively different from any subsequent attachment a child might form.
- However, this has been challenged by **Schaffer & Emerson's (1964)** study who found that infants in Glasgow had multiple attachments by the age of 18 months. These included fathers, brothers, sisters, grandparents and close neighbors.
- Bowlby argued there was a critical period for attachment, the first 2-3 years of life. He based this on the work of **Karl Lorenz (1937)** who observed that a newly hatched set of goslings followed around the first object they saw – i.e. him (known as imprinting).
- Bowlby believed that if this bond is not formed, or is broken, then there would be permanent emotional damage because children only develop socially and emotionally when an attachment provides them with feelings of security.

- This became known as the maternal deprivation hypothesis, which states that continual disruption of the attachment between infant and primary caregiver (i.e. mother) could result in long term cognitive, social, and emotional difficulties for that infant.
- To support his hypothesis, he studied 44 adolescent juvenile delinquents in a child guidance clinic. Through interviews he diagnosed 32% (14) of the thieves as 'affectionless psychopaths' (having no affection for others and no shame or sense of responsibility). 86% of these 'affectionless psychopaths' had experienced a long period of maternal separation before the age of 5 years (they had spent most of their early years in residential homes or hospitals and were not often visited by their families. However it is important to bear in mind that the research was correlational and non-experimental. It contained gender and researcher bias.
- **Mary Ainsworth: classifying and explaining types**
- A number of researchers have expanded the work of Bowlby, to include identifying and classifying attachment types and researching the factors associated with the development of attachments.
- **Ainsworth (1969)** sought to develop a reliable method of measuring quality of attachment using a laboratory procedure called the **Strange Situation**. It is still the most commonly used method for measuring the level of attachment between the infant and the mother.
- The rationale behind the Strange Situation is that infants display different behaviors towards the primary caregiver and towards strangers according to the security of attachment. The Strange Situation has eight episodes each lasting 3 minutes. Although every aspect of the participants' reactions are observed and videotaped, what's most carefully attended to is the child's response to the mother's return.

Episode	Events	Attachment Behavior Observed
1	Experimenter leaves parent and baby to play	
2	Parent sits while baby plays	Use of parent as secure base
3	Stranger enters, talks to parent	Stranger anxiety
4	Parent leaves; stranger lets baby play, offers comfort if needed	Separation anxiety
5	Parent returns, greets baby, offers comfort if needed; stranger leaves	Reactions to reunion
6	Parent leaves	Separation anxiety
7	Stranger enters, offers comfort	Stranger anxiety; ability to be soothed by stranger
8	Parent returns, greets baby, offers comfort, lets baby return to play	Reactions to reunion

SOURCE: Based on Ainsworth et al., 1978.

- **Based on the Strange Situation, Ainsworth (1978) proposed three types of attachment**

- **Type A** – insecure attachment (avoidant) these children play independently and do not show distress when the mother leaves nor make contact when she returns. Between 20-25% of British children ages 12-18 months are classified as type A
- **Type B** – secure attachment; these children play independently and do not show much distress in episodes 3 and 4. They greet the care giver positively when she returns. They are likely to be distressed in episode 6 when left alone. They require and accept comfort from the care giver in episode 8. Between 60-75% of British children are classified as type B
- **Type C** – insecure attachment (resistant); these children explore less in episode two than others. They are very distressed on being left with a stranger but, although they rush to their care giver on her return, they do not readily accept comforting. Around 3% of British children and 15% of American children are classified as type c.
- Support for the universality come from cross cultural studies. **Ijzendoorn & Koonenberg, (1988)** found that secure attachment type B was the most common attachment type across the world. However, there were significant cultural variations in insecure attachments which demonstrate that universality is limited. Variations in insecure attachment could be a result of child-raising practices and environmental factors. It could also show that the strange situation is an imposed etc.
- The Strange Situation is a laboratory based procedure, and represents a rather artificial approach to the study of attachment. **Bronfenbrenner (1979)** pointed out that infants' attachment behaviors are typically much stronger in the laboratory than they are at home. The behavior of the stranger is very artificial in the set up.
- **The role of early attachment in the subsequent formation of relationships Hazan & Shaver (1997)**
- Attachment theory assumes that internal working models continue throughout the lifespan and research shows there may be some relationship between the experience of attachment in childhood and adult love relationships.
- **Hazan & Shaver** wanted to see if there was a correlation between the infant's attachment type and their future approach to romantic relationships. To test this **Hazan & Shaver** devised the 'Love Quiz' which consisted of 2 components:
 - A measure of attachment type - a simple adjective checklist of childhood relationships with parents and parents' relationships with each other
 - A love experience questionnaire which assessed individual's beliefs about romantic love - eg: whether it lasted forever, whether it could be found easily, how much trust there was in a romantic relationship, etc

- The Love Quiz was printed in local newspaper the Rocky Mountain News and readers were asked to send in their responses. Hazan & Shaver analyzed the first 620 replies sent in from people aged from 14 to 82.
- They classified the respondents' according to **Mary** Ainsworth's infant attachment types of secure, anxious-resistant and anxious-avoidant and looked for corresponding adult love styles. Hazan & Shaver found a strikingly high correlation between the infant attachment types and the adult romantic love styles.
- **They found that;**
 - 1. **Secure types** described their love experiences as happy, friendly and trusting - emphasizing being able to accept their partner regardless of any faults - with such relationships tending to be more enduring, with the initial passion reappearing from time to time and for some 'romantic love' never faded. They were happy depending on others and comfortable if others are dependent on them. They were happy to be close to others.
 - 2. **Anxious-resistant types** experienced love as involving obsession, a desire for reciprocation, emotional highs and lows, extreme sexual attraction and jealousy, and worry that their partners didn't really love them or might abandon them. Their desire for intense closeness could frighten others away.
 - 3. **Anxious-avoidant types** typically feared intimacy, emotional highs and lows, and jealousy and believed they did not need love to be happy. They were uncomfortable being close to and/or depending on others.
- **Hazan & Shaver** concluded that there was evidence to support the concept of the inner working model having a life-long effect. However it is important to bear in mind that people were recording their memories of infant experience and such memories may not always be accurate. Similarly they may have given socially desirable answers

V. Discuss potential effects of deprivation or trauma in childhood on later development

- According to Bowlby if the attachment figure is broken or disrupted during the critical two year period the child will suffer irreversible long-term consequences of this maternal deprivation.
- Bowlby used the term maternal deprivation to refer to the separation or loss of the mother as well as failure to develop an attachment.
- The underlying assumption of Bowlby's Maternal Deprivation Hypothesis is that continual disruption of the attachment between infant and primary caregiver (i.e. mother) could result in long term cognitive, social, and emotional difficulties for that infant. To support his hypothesis, he studied 44 adolescent juvenile delinquents in a child guidance clinic.
- **44 Thieves Study (Bowlby, 1944)**

- **Aim:** To investigate the effects of maternal deprivation on people in order to see whether delinquents have suffered deprivation. According to the Maternal Deprivation Hypothesis, breaking the maternal bond with the child during the early stages of its life is likely to have serious effects on its intellectual, social and emotional development.
- **Procedure:** Between 1936 and 1939 an opportunity sample of 88 children was selected from the clinic where Bowlby worked.
- Of these, 44 were juvenile thieves and had been referred to him because of their stealing. He diagnosed 32% (14) of the thieves as 'affectionless psychopaths'. (having no affection for others and no shame or sense of responsibility)
- The other 44 'controls' had been referred to him due to emotional problems - though they did not display anti-social behavior.
- On arrival at the clinic, each child had their IQ tested by a psychologist who also assessed the child's emotional attitudes towards the tests. At the same time a social worker interviewed a parent to record details of the child's early life. The psychologist and social worker made separate reports. A psychiatrist (Bowlby) then conducted an initial interview with the child and accompanying parent.
- **Results:** Bowlby found that 86% of the 'affectionless psychopaths' in group 1 ('thieves) had experienced a long period of maternal separation before the age of 5 years (they had spent most of their early years in residential homes or hospitals and were not often visited by their families)
- Only 17% of the thieves not diagnosed as affectionless psychopaths had experienced maternal separation. Only 2 of the control group had experienced a prolonged separation in their first 5 years.
- **Conclusion:** Bowlby concluded that maternal separation/deprivation in the child's early life caused permanent emotional damage. He diagnosed this as a condition and called it Affectionless Psychopathy. According to Bowlby, this condition involves a lack of emotional development, characterized by a lack of concern for others, lack of guilt and inability to form meaningful and lasting relationships
- The sample was not representative and contained **gender bias**.
- Bowlby's research was in the form of highly-detailed and thoroughly-comprehensive case studies. While these generally provide rich sources of information and Bowlby's were triangulated, it is dangerous to generalize from case studies as their findings are unique to the case being studied.
- The research was correlational and non-experimental; for ethical reasons separation/deprivation cannot be manipulated as an independent variable, - thus, cause and

effect cannot be inferred. i.e: it cannot be said that separation/deprivation causes emotional damage or Affectionless Psychopathy. Other factors, such as conflict in the family, may have led to these outcomes. Thus, as **Rutter (1972)** pointed out, Bowlby's conclusions were flawed, mixing up cause and effect with correlation.

- The study was vulnerable to researcher bias. Bowlby conducted the psychiatric assessments himself and made the diagnoses of Affectionless Psychopathy. He knew whether the children were in the 'theft group' or the control group. Consequently, his findings may have unconsciously influenced by his own expectations. This potentially undermines their validity.
- **The case of Genie (Curtiss, 1977)**
 - Such a study shows how although certain aspects of early deprivation and trauma may be overcome such the ability to form attachments (socio-emotional development) other aspects – such as language (cognitive development) may be more difficult. However this case has too many confounding variables to draw firm conclusions.
- **Evaluation:**
 - Genie experienced a number of foster care givers and changes; she was also physically abused again. These factors may have confounded studies that attempted to measure her progress.
 - Furthermore Genie may have been born mentally challenged, further confounding progress reports
- **Rutter et al (2001)**
 - A study of 111 Romanian adoptees (drawn from a larger sample of post-institutionalized Romanian children adopted into the UK) placed before 24 months.
 - On arrival in the UK they were physically and mentally underdeveloped. This was compared with 52 UK-born adoptees placed before 6 months, found significant differences in the distribution of attachment classifications between organized (secure, avoidant, ambivalent) and not organized (disorganized or insecure-other) classifications at age 4.
 - He found significant differences in 3 areas;
 - 50% of the non-deprived UK adoptees were classified as secure, while only 37.5% of the deprived Romanian adoptees were found to display this attachment type. Insecure attachment was shown through lack of clear differentiation between adults, easily going off with a stranger and not checking with their adoptive parents in anxiety-provoking situations.
 - The Romanian (later-placed) sample of children suffered more cognitive impairment than the UK sample

- There was more impairment in social functioning amongst the Romanian children “near autistic features.
- However, Rutter did find that children who endure the longer lasting deprivation were ‘normally functioning’ by the age of six. This lends some support to Bowlby’s critical period (as all children had parents by aged 2). It also highlights the role of ‘resilience’ in children and finally, the idea that it is possible to recover from the adversities of a deprived childhood.

VI & VII. Define resilience and discuss strategies to build resilience

- Amongst children who experience adverse circumstances some children may go on to develop mental health problems and criminality, whereas many more do not. One explanation for these differences may be found in the concept of ‘resilience’
- Whether a child will have a positive or negative outcome depends on the number of risk factors present and the number of protective factors. Therefore resilience in a child is most likely a result of reduced risk factors and a high number of protective factors.
- Risk factors do not invariably lead to negative outcomes but increase the probability of problems later in life. Negative outcomes include school failure, psychiatric problems, criminal involvement, vocational instability and poor social relationships later in life.
- Parent conflict, family breakdown, poverty, social isolation, criminal family background and belonging to a minority group are among the most common risk factors cited by developmental psychologists. Research also shows that it is less significant which risk factors are present, but how many are present in the life of a child.
- Protective factors include intelligence and temperament, secure attachments, authoritative parents, socio-economic resources and social support.
- **Kauai Longitudinal Study (Werner & Smith, 1998)**
- Involved a multi-racial cohort of 698 children, born in 1955 that were studied at 6 intervals between the ages of 1 and 40.
- The sample, 30% had experienced a cluster of risk factors. Of this 30% two-thirds of the children had experienced four or more risk factors. The researchers identified the following risk factors – poverty, low maternal education, family conflict and breakdown, parental desertion, parental alcoholism and parental mental illness.
- In this group they discovered serious learning or behavior problems at age 8, and delinquency, mental health problems and teenage pregnancy at age 18.
- However, one-third of this group did not show any negative outcomes. **Werner & Smith** identified some of the following protective factors - easy temperament, at least average intelligence, close attachments, positive attention, three or fewer siblings and religious faith.

These children had developed into competent, confident and caring adults who succeeded in their school, home and social lives.

- **Strategies to build resilience**

- Research shows that resilience can be cultivated by providing and promoting protective factors in a child's life. As a place where young people spend much of their daily lives, schools are best placed to implicitly and explicitly foster resilience.

- According to **Sagor (1996)** and **Wang et al. (1994)**, schools can provide support to students, particularly those at risk, through resilience-building experiences that focus on five themes:

- "resilience refers to the process of, capacity for, or outcome of successful adaptation despite challenging or threatening circumstances'

- competency (feeling successful)

- belonging (feeling valued)

- usefulness (feeling needed)

- potency (feeling empowered)

- optimism (feeling encouraged and hopeful)

- **Ackerman (1997)** argues schools can also be more explicit in developing resilience in children, particularly those who have been hit by hardships such as family breakdown. . He outlines how group therapy, peer therapy, classroom meetings, individual counseling, and play therapy all build resilience if delivered consistently.

- **Government Programs**

- The New York Center for Children noted in 2004 that 872, 000 children were abused or neglected in America. They also stated that 81% of all deaths from child abuse comprised those of infants and toddlers. They propose the following strategies for building resilience and preventing further abuse.

- Head Start programs - Head Start is a US program designed to help children from birth to age five, who come from families at or below the poverty level. The goal of Head Start is to help these children become ready for kindergarten, and also to provide needed requirements like health care and food support. President Lyndon Johnson approved Head Start in 1965 as part of his more comprehensive program that he termed the War on Poverty. **Tove et al. (2005)** found parents who participated in Early head start programs became more emotionally supportive, better at stimulating language development, and used less corporal punishment.

- However a 2010 government commissioned Impact Study found that Head Start might be ineffective. The Impact Study took advantage of the fact that most Head Start centers across the

nation have waiting lists of parents wishing to enroll their children in the program. Using a random, lottery-like process, 3-year-olds and 4-year-olds on the waiting list were offered the opportunity to enroll. This resulted in two groups (or experimental “conditions”) — children who were offered the chance to enroll in Head Start and those who were not. Both groups were followed to the end of first grade. Evidence suggests that the achievement of children who applied but were not randomly assigned to a spot in a Head Start classroom had caught up to Head Start students’ achievement levels by first grade.

- **After-school programs** in all high-risk communities - **Mahoney et al. (2005)** carried out a longitudinal study of the effect of after-school programs on the development of academic performance and motivation for disadvantaged children. They found participants who participated in a full year's after-school programs achieved better test scores, reading achievement, and over all motivation.
- **Home-visit programs** - Such programs have been shown to be effective in reducing child abuse particularly in low-income families. They serve a practical purpose in increasing access to healthcare and also provide a psychological boost, lowering rates of maternal depression and thus enhancing the formation of attachment between mother and baby. They serve to remind the mother of her obligations to care for the child and demonstrate a wider social interest in her parenting skills.
- **Teen-mother parent education** - **Britner and Reppucci (1997)** found groups for adolescent mothers were effective in providing peer support and reducing social isolation and depression. The program also involved the extended family in the baby's care providing a wider social support network for new mothers.

VIII. Discuss the formation and development of gender roles

- **Biological theories**
- The biological approach assumes gender differences and therefore gender roles are a result of sex differences in biological processes.
- After the embryonic development of the sex glands, hormones which are powerful chemical substances, are secreted into the blood stream and reach every cell of the embryo. These hormones form a defined reproductive tract in females and tell a male's reproductive tract not to form.
- The hormones also force the development of external genitalia (sex organs on the outside of the body). Finally, the hormones travel to the brain and cause differences between males and females to occur there. A bio-psychologist would argue that it is these differences in brain development, and the differences in brain activity caused by the secretion of certain hormones in during puberty, that cause men to behave differently from women (e.g. acting more

aggressively). In other words, women and men act, think and feel differently because of differences in how their brains work.

- Some researchers argue that testosterone has a masculinizing effect on the brain of the developing child and this can explain behavioral differences as well as gender identity in children. Testosterone, which is produced in greater quantities by men, affects several types of behavior, some of which are regarded as 'typically male'. **Dabbs et al (1995)** found that violent offenders had higher testosterone levels than non-violent offenders).
- Conversely women have higher levels of oxytocin than men. Oxytocin seems to affect the formation of bonds and attachments between people, and this has been used to explain the more nurturing and emotionally responsive qualities usually attributed to women.
- **Evaluation**
- **Gorski et al (1985)** injected female rats with testosterone for a period prior to birth. After they were born their appearance and behavior was compared with a control group of females whose testosterone levels had been normal. The experimental group had masculinised genitals and showed masculine behavior (e.g. trying to mount other females). This showed that male sex hormones had both physiological and behavioral effects, in rats at least.
- It is clear from a range of studies involving humans and other animals that chromosomal and hormonal differences between males and females affect a range of masculine and feminine behaviours, which supports the biological view. This is clearly shown in the case of **Bruce/Brenda (later, David) Reimer** in which a biological boy raised as a girl always felt like a boy, and went on to have surgery to revert back to being a boy.
- The biological view of gender is supported by those cross-cultural studies that have found universal features of gender. For example, in all cultures studied, men are found to be more aggressive than women, which suggest an innate, biological difference.
- However, much of this research is correlational. Consequently, whilst it indicates a relationship between, for example, testosterone levels and risk taking, it does not indicate the direction of causality. Whilst higher testosterone might cause people to make riskier decisions, it might also be that the process of taking risks causes testosterone levels to rise.
- However, it is important not to ignore the fact that there are considerable differences between some cultures in their gender behavior (**Mead, 1935**)
- **Social learning theory**
- According to social learning theory (**Bandura, 1977**) the development of gender roles occurs as a result of the child's experiences, and not biology.

- In general terms the child learns to behave in ways which are rewarded and to avoid behaving in ways which are punished. Since society has expectations about the ways in which boys and girls should behave, such rewards and punishments lead to sex-typed behavior.
- This is known as direct tuition – **Fagot (1989)** carried a longitudinal study and observed that parents encouraged sex-typed behavior and discouraged sex-inappropriate behavior even before the age of 2. Boys were reinforced for playing with gender appropriate toys (e.g. bricks) and punished for playing with dolls. Girls were reinforced for staying close to the parent and punished for rough and tumble play. Parents making most use of direct-tuition tended to have children who behaved in the most sex-typed way.
- **Evaluation**
- This theory takes into account the social and cultural context in which gender socialization occurs
- A number of other studies have shown that girls and boys are reinforced and punished for different behaviors. For example **Dweck et al (1978)** found that teachers reinforced boys for getting things right but reinforced girls for working neatly. **Sroufe et al (1993)** observed children around the age 10-11 years, and found that those who did not behave in a gender-stereotyped way were the least popular. Such a study indicates that children establish a kind of social control in relation to gender roles very early, and it may well be that peer socialization is an important factor in gender development.
- However the theory does not explain the degree of difference in which individual boys and girls conform to gender role stereotypes.
- The theory suggests that gender is more or less passively acquired. However children are active participants in their socialization process and they perceived and understand their experiences differently as they develop cognitively. Gender identity is a complex process that involves cognitive as well as environmental and biological factors.
- **Gender schema theory (Martin & Halvorson, 1978)**
- Gender schema theory is based on the assumption argue that early cognitive processes play a key role in gender development
- Children form cognitive schemas about gender as soon as they discover and are able to categorize their own sex. The establishment of this basic gender identity (2-3 years) motivates children to learn about the sexes and start building a gender schema.
- First, children construct an in-group schema (for their own sex) and an out-group schema (for the opposite sex).Such schema includes a broad categorization of objects, behaviors, and traits as being either for boys or for girls (e.g. trucks are for boys, dolls are for girls)

- These schema determine what boys focus on and what girls focus on. Such focus leads to the construction of a second schema, the 'own sex' schema. This involves gathering more detailed information about those behaviors, traits, and objects that are considered to be characteristic of their in-group (sex)
- For example a girl who has a basic gender identity might first learn that dolls are for girls, and trucks for boys, and because she is a girl and wants to act consistently with her self-concept may gather more information about dolls to add to her own-sex schema, whilst largely ignore information about trucks and cars.
- Once formed gender schemas structure experience by providing a framework for making sense of the social world. According to this theory children are more likely to encode and remember information consistent with their gender schemas and to either forget or distort schema – inconsistent information.
- Support for this idea can be seen in a study by **Martin & Halvorson (1983)**. The researchers used a sample of boy and girls aged 5-6 years. They showed them pictures of males and females in activities that were either gender consistent (girls playing with dolls) or gender inconsistent (girls playing with guns). A week later the children were asked to remember what they had seen on the pictures. The researchers found that the children distorted the scene to reveal gender consistent behavior (eg. by saying it was a boy that was playing a gun, not a girl)
- **Evaluation**
- This research gives some insight into why inaccurate gender schemas/ stereotypes persist. Gender schemas are maintained because children pay attention to and remember information that is consistent with these schemas
- However, it is not clear why gender schemas develop and take the form that they do
- **Conclusion: Interaction**
- These factors alone cannot fully account for the development of gender roles. An interactive perspective assumes a number of biological, cognitive and social processes account for gender role. Fr example biological development occurs before birth.
- The baby's sex influences how the child is labeled and treated accordingly. Early gender typing occurs due to reinforcement of same sex activities. As a result by 3 years the child forms a basic gender identity leading to the development of gender schemas. More attention is directed towards same sex models. Children continue to learn appropriate gender roles based on what society portrays through its gender curriculum (**Shaffer, 2002**).

IX. Explain cultural variations of gender roles

- Cross- cultural studies of gender can help determine to what extent culture plays a role in creation and maintenance of gender roles. Research seems to lend weight to arguments that gender role is universal, and therefore possibly biological. But some research suggests that gender roles are a learned phenomena, and that culture is the socializing agent
- Most traditional cultures distinguish between men’s and women’s work but Mead’s study shows that labor division is not the same in all cultures, thus challenging the view that gender roles are innate (biological) and universal.

Berry, Bacon and Child (1991)

Studied socialization pressures in 110 non – industrialised countries. They considered 5 characteristics – nurturance, responsibility, obedience, achievement, self –reliance.

They found some widespread universal patterns in gender roles - boys are *instrumental* and girls are *expressive* .

75% of these non-industrialised nations expected girls to be more nurturing
55% of nations expected girls to be responsible
79% of nations emphasized achievement in boys
77% of nations expected more self-reliance in boys

Mead (1935)

Classic study of societies in Papua New Guinea showed there were both similarities and differences in gender roles across societies. In on society – the Mundugumour – both males and females displayed what we would call masculine behavior – aggressive, competitive, emotionally unresponsive with little interest in the children. In contrast the Arapesh were warm, emotional and gentle , regardless of their gender. The ideal in their society was the equivalent to our ideas of femaleness. Men and women shared the tasks relating to the crops and children.

Finally, the Tchambuli were the opposite of traditional gender roles; men spent a lot of time gossiping and discussing adornments, whilst the women were responsible for food, clothes and tool production.

- The role of culture can also be seen in the changes in gender roles over the last 50 years. In western cultures women have steadily entered the labor market, and whilst there still exist specific gender roles (still more men are plumbers and engineers, and women primary schoolteachers and nurses) gender roles are slowly converging.
- Women occupy positions of power, are firefighters and soldiers (although they still can’t fight on the frontline), men are becoming homemakers, nurses and child care providers. A research study by **Renicke (2006)** revealed that young Danish fathers believe it is important for them to

have close contact with their baby and take part in caring for the child. This clearly supports Mead's argument that gender role differences reflect cultural norms and expectations.

X. Describe adolescence

- In the western world adolescence is described as the period of life from puberty to adulthood (roughly ages 12 – 20) characterized by marked physiological changes and psychological changes.
- The biological transition of adolescence, or puberty, is perhaps the most observable sign that has adolescence has begun. Technically, puberty refers to the period during which an individual becomes capable of sexual reproduction.
- More broadly speaking, however, puberty is used as a collective term to refer to all the physical changes that occur in the growing girl or boy as the individual passes from childhood into adulthood. Although all adolescents experience the same physical changes the timing of physical maturation varies widely.

	Primary sex characteristics	Secondary sex characteristics
Boys	Enlargement of the testes, penis, prostate gland	Growth spurt Broadening of shoulders Facial and bodily hair Breaking of the voice
Girls	Primary sex characteristics	Secondary sex characteristics
	Maturation of the uterus, vagina, and other parts of the reproductive system. Onset of menarche (period)	Body fat around and widening of hips Breast development

- There are two types of physical changes that occur during puberty:
- A) Changes to primary sex characteristics and B) changes to secondary sex characteristics.

XI. Discuss the relationship between physical change and development of identity during adolescence

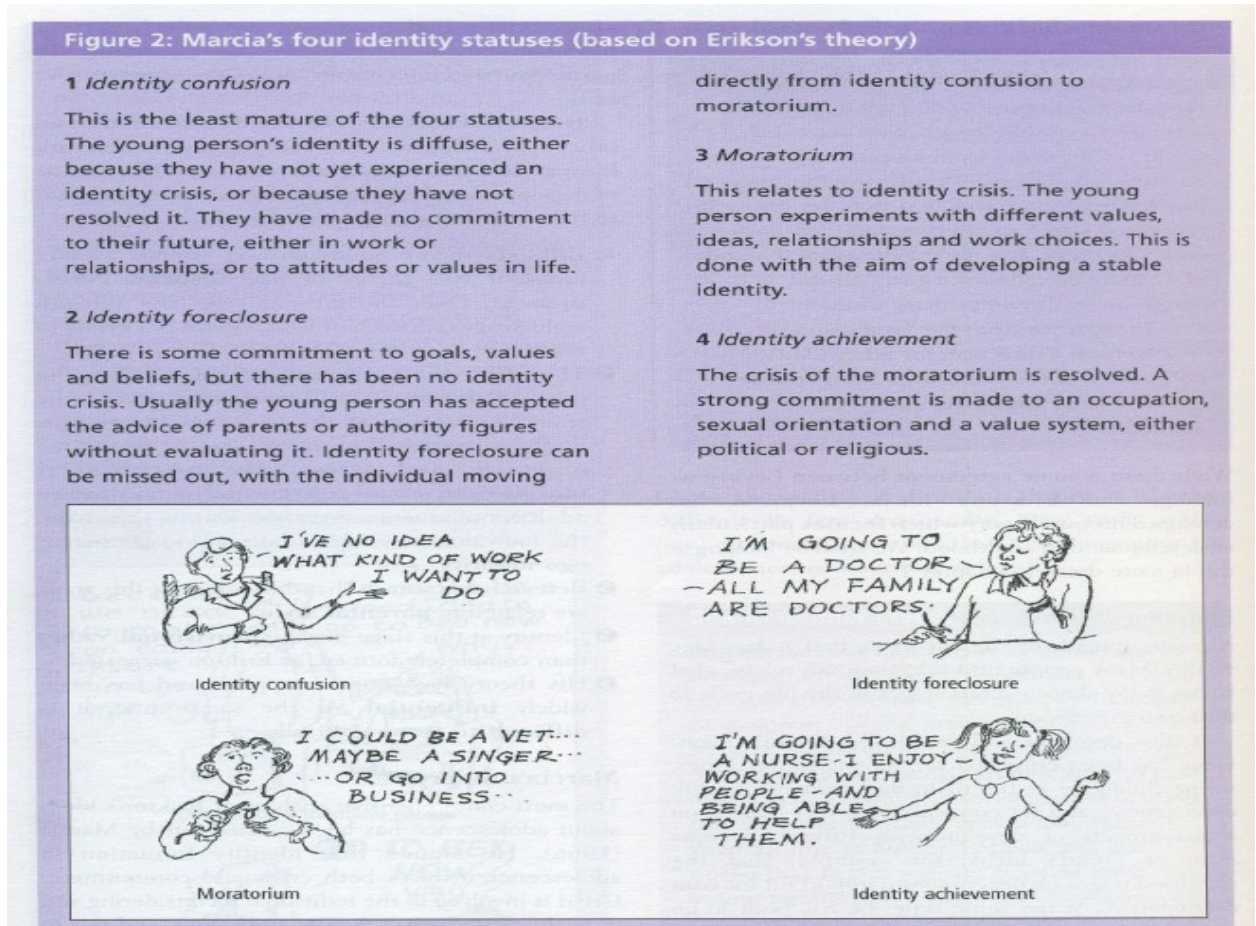
- Such rapid physical changes inevitably lead to psychological change. These rapid physical changes affect the way the adolescent perceives him or herself. So begins an exploration of their identity – physical, sexual and psychological.
- Body image lies at the heart of adolescent identity. A positive self-identity can be dependent on positive adjustment to the physical changes of puberty. There is a difference in the way girls and boys adjust to these changes.

- The **cultural ideal hypothesis** (Simmons & Blyth, 1987) states that puberty brings boys closer to his physical ideal through growth in height and muscle but take girls further away from the prevailing lean female ideal through increased tissue fat.
- Through the media, girls are subject to highly valued images of an extremely thin female body. In order to have a positive adjustment to physical changes girls assess changes in their body in terms of whether they are becoming more or less physically attractive. If their body appears to be far from the cultural ideal of slimness that dominates the West, they perceive it as less attractive. They develop a negative body image and low self-esteem.
- Boys on the other hand express more satisfaction and pride in their changing body than do girls. In order to have a positive adjustment to physical changes evaluate themselves on such factors as body efficiency and physical ability. As most boys do develop into terms of height and muscle, and therefore strength, dissatisfaction tends to be low.
- There are however cultural differences in perceptions of body image. Jaegar (2003) identified certain cultures being more dissatisfied with their body image than others. Similarly, Ferron (1997) examined beliefs about body image in a sample of aged 13-17 French and US adolescents. Although samples from both countries had similar perceptions about ideal body image the two samples differed in terms of beliefs about control of body image. The US sample believed the body is a representation of diet, exercise and will-power, whilst the French believed that body shape /size is more predetermined (biological predisposed). The former set of beliefs puts pressure on adolescents to attain the ideal body shape, and is more likely to make them feel guilty about not achieving it.
- The cultural ideal hypothesis and studies such as those mentioned above highlight that whilst the physical changes in adolescence contribute to a sense of identity, social (cultural ideals) and cognitive factors (beliefs about body image) also interact with physiological factors to give a sense of identity.
- Linked to physical changes is the development of sexual identity. Sexual identity is a matter of understanding one's sexual feelings, attractions, and behaviors (Savin-Williams, 1998). While formation of sexual identity may remain an unconscious process for many adolescents, for others it will be a period of experimentation and exploration. The exploration of a sexual identity occurs within the context of the "presumption of heterosexuality" (Herdt 1989) that exists in most cultures. This potentially leaves the homosexual adolescent in a state of confusion.
- However it is important to bear in mind that it is not always possible for adolescents to explore their sexuality as it is an area that is heavily influenced by social and cultural norms. Whilst some cultures have a permissive attitude to adolescent sexuality and allow for experimentation - a 2008 study conducted by YouGov (UK government survey website) found that 20% of 14-17-year-olds surveyed revealed that they had their first sexual experience at 13 or under - other cultures are very restrictive and do not allow sexual exploration.

XII. Examine psychological research into adolescence

- Most theories on development have tended to focus on the early years of childhood. Erikson's is one of the few that continue throughout the lifespan. He believed that we all go through eight stages in our lives. He focused on the psychosocial aspects of our development, that is our relationships with ourselves, other people and the social environment.
- At each stage we face a particular conflict or issue which Erikson refers to as a crisis. Each crisis need to be resolved to enable further development. Stage 5 is most relevant to adolescent development.
- **Stage 5 Identity Vs Role confusion (Erikson, 1950)**
- According to Erikson the main challenge of adolescence is to form a clear sense of identity. They are trying to answer the question of 'who am i?'. Adolescents are developing an identity in domains such as;
 - Career, occupations
 - Sexual orientation
 - Personal beliefs and values
- Adolescents are confronted by the need to establish identities for themselves and this may be challenging since there are strong social and cultural pressures to behave like an adult.
- At this point, adolescents may experience an 'identity crisis' but society allows the young person to experiment with and explore different ideas about careers, sexual identity and personal values before adult commitments are made. Erikson called this period a 'moratorium' – a kind of 'time-out' period.
- Difficulty in coping with this crisis (for whatever reason) means that the adolescent may continue to be confused about their role in life and may develop an unstable sense of self. To deal with this uncertainty the adolescent may engage in subgroups and develop a negative or socially unacceptable identity.
- **Evaluation**
- Erikson's theory has good face validity. Many people find that they can relate to his theories about various stages of the life cycle through their own experiences.
- However Erikson's theory is descriptive rather than based on experimental studies. He used the term 'identity' in many different ways, and because it was never operationalised it wasn't easily testable. He relied mainly on the use of interviews and questionnaires which present problems of interpretation and biased answering.

- Erikson stressed his work was a 'tool to think with rather than a factual analysis'. Its purpose then is to provide a framework within which development can be considered rather than testable theory.
- **James Marcia (1955)**
- The most comprehensive analysis and testing of Erikson's fifth stage has been carried out by **James Marcia**
- Addressing Erikson's notion of identity crisis, Marcia posited that the adolescent stage consists neither of identity resolution nor identity confusion, but rather the degree to which one has explored and committed to an identity in a variety of life domains.
- Marcia developed an interview method to measure identity as well as identify four different identity statuses an adolescent could be at. Exploration refers to a period in which adolescents are searching for sensible alternatives before making a commitment to a specific identity.
- Commitment is the end goal – through experimenting with different types of work, relationships and values adolescents find the ones that suit them best. The level of exploration and commitment indicates the stage (or status) they were at. The four identity statuses are;
- 1. Identity diffusion (no commitments, no explorations).
- 2. Identity Moratorium (exploration, but no commitments)
- 3. Identity foreclosure (commitments, but no exploration)
- 4. Identity achievement (exploration and commitments)



- **Evaluation**
- Both Marcia and Erikson see adolescence as a time of personal and social upheaval – Erikson called it a time of ‘storm and stress’ but is this necessarily the case ?
- **Rutter (1976) Isle of Wight study**
- A study of 2,303 14 and 15 year old boys was carried out. There were two areas of study 1. Parent and child conflict and 2. “Inner turmoil”. Data included questionnaires completed by parents and teacher, together with interviews with some of the sample and psychiatric assessments.
- Results: The study found that the average adolescent is not in a state of conflict with their parents, and only 1/5 reported feeling miserable or depressed.
- These results question the idea of adolescence as a time of crisis. The study was however dependent on self-report data which questions its reliability.
- **Mead (1939) Samoa Study**

- Anthropologist Margaret Mead studied adolescents on the island of Samoa.
- Results: She found that adolescents at an early age were familiar with the facts of life, death and sex. Sexuality in particular was treated in an open and casual manner, so the guilt and shame and shame often experienced by western adolescents was avoided. Adolescence in Samoa was in general an uneventful time, since life as a whole was much less complex.
- Although now dated studies such as this show both theories contain western bias. Not all cultures have the equivalent of 'storm and stress'