FACTBOOK

AO1 and AO3

GENDER

Gender

Sex and Gender

Sex refers to a person's biological status as either male or female, while gender relates to their social and psychological characteristics of masculinity or femininity.

Sex refers to a person's biological status as either male or female. This is determined by their sex chromosomes, where XX is female and XY is male.

Sex chromosomes influence hormonal differences as well as anatomical differences such as reproductive organs, body shape or hair growth.

Sex is innate and the result of nature, whilst gender can be in some ways influenced by nurture.

Sex is assigned at birth and cannot be changed, whereas gender is assigned because it is a social construct rather than a biological fact.

Sex is a biological term whereas gender is a psychological term.

Gender refers to a person's psychosocial status as either masculine or feminine. This includes attitudes, roles and behaviour associated with being male or female.

Ideas of gender are heavily influenced by social norms and cultural expectations.

Gender identity is the classification of oneself as male or female.

Sex-role stereotypes

Assumptions about characteristics and traits of males and females can lead to sex-role stereotypes.

Sex-role stereotypes are shared beliefs regarding what is or is not appropriate behaviour for males and females.

When sex-role stereotypes are accepted by the majority of people they can become norms in society which can lead to pressure to conform to these expectations.

Sex-role stereotypes are usually developed through socialisation and are passed down through generations.

A typical male sex-role stereotype is to see them as more independent, physically strong and aggressive.

Typical female attributes associated with sex-role stereotypes are to see them as more gentle and emotional types.

Once gender stereotypes have been accepted into the norms of society, each generation will be expected to live up to these stereotypes.

Any behaviour not consistent with sex-role stereotypes is said to be deviant and is frowned upon by society.

Sex-role stereotypes are a set of shared expectations that people within a society or culture hold about what is acceptable behaviour for men and women.

The expectations in sex-role stereotypes are communicated through society and may be reinforced by parents, peers and the media.

Seavey et al (1975) conducted a study where adults were introduced to a baby dressed in yellow, who were told it was either a boy or a girl. When told the baby was a girl the adults gave her the doll to play with, which suggests there are sex-role stereotypes in toy preference.

Smith & Lloyd (1978) conducted a study in which babies aged 4-6 months would be dressed half the time in boys clothing and half the time in girls' clothing. This was regardless of their actual sex. They found that gender appropriate behaviour explained their observations and findings.

Smith & Lloyd (1978) found that adults interacting with babies assuming to be boys were more likely to be encouraged to be adventurous and active and given gender specific toys such as a hammer. This was the opposite for babies assumed to be girls.

Eccles et al (1990) found that parents often influenced their children's activity choices on the basis of gender stereotypical ideas.

Sex-role stereotypes are likely to differ by culture, which supports the idea that gender roles are influenced more by external factors than biological factors.

One limitation of sex-role stereotyping in society is that it may place invisible barriers on the expectations of what children can and cannot do. For example if a boy wants to become a nurse, he may worry about how society views this, as boys are not always expected to be caring.

Imperato-McGinley et al (1974) studied the Batista family from the Dominican Republic. Four of the children within the family were identified as female at birth and raised as such until puberty, when they "changed" into males. Their bodies physically developed along the male pathway.

In Imperato-McGinley et al (1974) hormonal changes at puberty which were absent in the womb, were believed to be responsible for the changes in gender seen in the boys.

Imperato-McGinley et al (1974) illustrated gender identity maybe flexible, as the Batista boys abandoned their female identity at puberty with very few problems of adjustment. They adapted to their new roles as males.

It can be argued that research into sex role stereotyping is alpha biased, which exaggerates the differences between males and females.

Androgyny and Measuring Androgyny including the Bem Sex Role Inventory

Androgyny refers to a gender role characterised by a balance of both masculine and feminine traits.

Androgyny refers to the combination of masculine and feminine characteristics.

Individuals who are seen to be androgynous show high levels of both male and female stereotypical characteristics.

Androgyny is not related to biology or sexual orientation; it is purely related to attitudes, beliefs and behaviours.

Within Psychology androgyny refers to a personality type that is characterised by a balance of masculine and feminine traits.

It is believed that individuals who are androgynous are better equipped to adapt to a range of situations.

Both men and women can be androgynous.

Society tends to assume that males are masculine and females are feminine. The two gender role identities are therefore seen as mutually exclusive; a person cannot be both masculine and feminine.

Psychologists have suggested that some people are not influenced by sex-role stereotypes and will not be forced into adopting a masculine or feminine gender role.

People who develop high levels of both masculine and feminine traits as part of their gender role identity are categorised as androgynous.

Tests of gender role identity used to assume that masculinity and femininity were opposite ends of the same spectrum of gender. Gender role identity could be assessed as either high in masculinity or high in femininity.

In the 1970s, Sandra Bem argued that this was an outdated view and she developed the Bem Sex Role Inventory (BSRI).

The Bem Sex Role Inventory (BSRI) is a test which includes 60 items related to masculine, feminine or gender-neutral behaviour.

The Bem Sex Role Inventory (BSRI) is a questionnaire consisting of 20 stereotypical masculine statements, 20 stereotypical female statements and 20 gender neutral statements.

On the Bem Sex Role Inventory (BSRI) examples of masculine statements are aggressive, competitive, independent and self-reliant.

On the Bem Sex Role Inventory (BSRI) examples of feminine statements are affectionate, gentle and softly spoken.

On the Bem Sex Role Inventory (BSRI) examples of neutral statements are happy, friendly, likeable and reliable.

When using the Bem Sex Role Inventory (BSRI) participants would rate each statement on a scale of 1 to 7.

On the Bem Sex Role Inventory (BSRI) a rating of 1 stipulates the characteristic is never true of the individual, whereas a rating of 7 is always true of the individual.

On the Bem Sex Role Inventory (BSRI) scores are classified on the basis of two dimensions; masculine-feminine and androgynous-undifferentiated.

To be regarded as androgynous Bem suggested individuals must score highly in masculinity and highly in femininity on the BSRI.

The BSRI is a self-report measure used to categorise gender role behaviour.

One strength of the BSRI is that it measures androgyny in a quantifiable way allowing comparisons to be made between individuals.

Bem (1974) presented data from a study using the BSRI and found that 34% of males and 27% of females tested as androgynous. This suggests androgyny is a common trait and exists as a separate category of gender role to masculine and feminine.

Peters & Cantrell (1993) used measures assessing the quality of relationships along with the BSRI and found that females who scored high on androgyny had the best relationships.

Burchardt & Serbin (1982) found that there was a negative correlation between androgyny score and depression scores, suggesting a flexible gender role may protect against mental health problems.

Flaherty & Dusek (1980) found self-esteem to be higher in those categorised as androgynous, suggesting a flexible gender role is positive.

Holt & Ellis (1998) found that all but two of the adjectives used in the original BSRI questionnaire were still valid in measuring gender role identity. This suggests that the BSRI has temporal validity years after its development.

The Bem Sex Role Inventory (BSRI) has been shown to have good test-retest reliability, suggesting that the categorisations made are consistent over time.

The Bem Sex Role Inventory (BSRI) is easy to complete and produces quantitative data which makes reliable comparisons between individuals easier.

The Bem Sex Role Inventory (BSRI) can be criticised for being culturally biased as it was developed in the USA and may not apply to other cultures.

One limitation of the BSRI is that people may not have an insight into their own degree of masculinity, femininity or androgyny.

Self-report scales like the BSRI may be subject to the social desirability effect, as people may select characteristics, they think should reflect their gender role.

Gender is a social construct which may be open to more interpretation than sex and subjective opinions on a questionnaire such as the BSRI may not be valid.

Bem place great emphasis on the idea the androgynous individuals are more psychologically healthy and a better placed to deal with situations. This has been challenged by Adams & Sherer (1985) who suggest that people with a greater proportion of masculine traits are better adjusted, as they are more highly valued in individualistic cultures.

Spence (1984) argues that there is more to gender than a set of behaviours typical of one gender or the other.

Alternative questionnaires such as the Personal Attribute Questionnaire (PAQ) add another dimension of instrumentality-expressivity to Bem's masculine-feminine dimension.

Theories of androgyny explain how individuals can be different depending on the context they are in; a female athlete can be highly competitive on the field but may be extremely nurturing at home with her children.

The Role of Chromosomes and Hormones

A person's sex is determined by their biological status of being either male or female. This is usually categorised based on the genitals a person has, but their biological sex is determined by their chromosomes and hormones.

Chromosomes carry genetic material that make every individual unique, this is their genotype.

Humans have 23 chromosome pairs, with one of each pair inherited from either parent.

Humans have 46 chromosomes which are arranged in pairs of which only one is sex linked to X or Y.

The sex chromosomes are found on the 23rd pair and are either XX if they are female and XY if they are male.

All normal egg cells produced by a human ovary have an X chromosome. Sperm carry an X or Y chromosome. The baby's sex is determined by the sperm that fertilises the egg cell.

The sex chromosomes instruct the body as to how to develop in terms of the gender pathway. This will also influence which hormones the body is exposed to.

In prenatal development sex chromosomes tell the body which reproductive organs to develop. They also send a signal to the sex organs to begin to produce hormones.

Chromosomes initially determine a person's sex but most gender development actually comes through the influence of hormones.

During prenatal development, individuals have sex glands (gonads) which are identical and have the ability to turn into either testes or ovaries.

The Y chromosome contains a gene called sex determining region Y (SRY), this tells the sex organs to become testes. The production of testosterone then influences the developing foetus to take on male characteristics, including a masculinised brain.

The SRY gene causes testes to develop in an XY embryo, these then produce androgens which are male sex hormones.

Androgens are a group of chemicals associated with male development, the most widely known of which is testosterone.

In Psychology if a research study is biased towards males it is said to be androcentric (male based bias).

The lack of a Y chromosome in the XX embryo will mean there is no SRY gene. And no instruction for the sex organs to develop into testes. Instead ovaries are developed and the foetus takes a female pathway.

The female pathway which began with XX chromosomes encourage the ovaries to produce female hormones such as oestrogen. This will then feminise the body as well as the developing brain.

If a Y chromosome is present, it produces a protein which causes the gonads to become testes, which will eventually produce testosterone and lead to the development of male sex organs.

Without the presence of a Y chromosome, the male pathway cannot take place and therefore female sex organs develop.

Hormones associated with males such as testosterone are also found in females. It is often assumed that hormones are typically male or female, when in fact they are found in different concentrations in both males and females.

Hormones such as testosterone affect gender development in the womb, with males being exposed to more testosterone, which may explain the differences found between a male and female brain.

Beeman (1947) castrated male mice and found that aggressiveness reduced. He later injected the mice with testosterone which re-established their aggressiveness, which is arguably a male trait.

Oestrogen is a hormone produced by the ovaries linked to the female reproductive cycle and is found in higher levels in females from puberty.

Oxytocin is a neuropeptide produced in the hypothalamus in the brain and secreted by the pituitary gland during child labour.

Oxytocin is also known as the love hormone as it is believed to encourage bonding between a child and it's mother. It is also produced in males and females while kissing, leading to positive emotions.

The hormone oxytocin is thought to reduce stress and promote feelings of love and intimacy between couples.

Women typically produce oxytocin in much larger amounts than men, particularly as a result of giving birth.

Oxytocin stimulates lactation making it possible for mothers to breastfeed their children. It also reduces the stress hormone cortisol and facilitates bonding.

Hormones have an influence on gender development at several stages of the maturation process.

Hormones act upon brain development prenatally in the womb and cause the development of the reproductive organs. They act again during adolescence when people reach puberty. This triggers the development of secondary sexual characteristics which differ between males and females.

Hormones influence the development of sex organs by flooding the womb with an influx of either testosterone or oestrogen.

Albrecht & Pepe (1997) found that giving oestrogen to pregnant baboons reduced miscarriage, suggesting that oestrogen is associated with successful pregnancy.

Hormones affect the development of a foetal brain and can masculinise or feminise the brain.

Money & Ehrhardt (1972) found that girls whose mothers took medication containing testosterone during pregnancy showed more masculine traits.

Differences in hormonal influence may explain structural differences in the brains of males and females.

Bryden & Saxby (1985) found that when males perform spatial tasks, there is greater electrical activity in the right hemisphere, whereas females seem to use both hemispheres.

Testosterone is a male hormone although it is present in small quantities in women.

According to evolutionary explanations, high levels of testosterone are linked to aggressive behaviour.

Wang et al (2000) investigated the link between increased testosterone and sexual behaviour. They studied 227 hypogonadal (low testosterone) men for 180 days and found testosterone replacement had a significant effect on their body.

In contrast O'Connor et al (2004) increased testosterone levels in healthy young men and found no significant changes in their sexual or aggressive behaviour.

Oestrogen is a female hormone that determines female sexual characteristics and menstruation.

Oestrogen causes physical changes in a woman’s body but can also influence their emotions and feelings during the menstrual cycle.

There are various conditions caused by changes in sex hormones for example premenstrual syndrome (PMS). This is a recognised medical condition caused by fluctuating hormone levels during a woman's menstrual cycle.

Congenital Adrenal Hyperplasia (CAH) is a rare genetic disorder that causes high prenatal levels of male hormones such as testosterone. This condition can affect males or females but is more obvious in newborn baby girls (XX).

Berenbaum & Bailey (2003) found females with Congenital Adrenal Hyperplasia (CAH) are often described by their family and friends as tomboys and often exhibit higher levels of aggression.

Hormones have a powerful influence over the physical and psychological stages of gender development.

Money et al (1974) documented the case of David Reimer, who was born genetically male, but following a botched circumcision at six months old was raised as a girl called Brenda. His twin was raised as a boy.

Money (1974) was developing his theory of gender neutrality and was exploring the influence of nature versus nurture on gender development.

In the case of David Reimer, biological changes such as hormonal influxes meant that Brenda never adjusted to life as a girl and eventually reverted to living as a man.

The case of David Reimer is evidence the chromosomal influence is more powerful than the environment in gender development.

Many studies investigating the effects of hormones on development have been conducted using animals. This makes generalisation problematic.

One limitation of the biological explanations of gender development are they fail to account for social factors in gender related behaviour.

Hofstede et al (2010) claim that gender roles around the world are much more of a consequence of social norms than biology.

Biological explanations of gender are reductionist as they suggest that chromosomes and hormones are the only explanations for development.

Atypical Sex Chromosome Patterns

Klinefelter's Syndrome

Klinefelter's Syndrome was first reported by Harold Klinefelter in the USA in 1942.

Klinefelter's Syndrome is an example of an atypical sex chromosome pattern.

Klinefelter's Syndrome is caused by the presence of an extra X chromosome (XXY) in males.

Klinefelter's Syndrome affects boys.

Individuals who have Klinefelter's Syndrome are biological males with the anatomical appearance of a male.

Individuals with Klinefelter's Syndrome may have physical characteristics such as tall stature, small testes, and reduced facial and body hair.

Klinefelter’s Syndrome is a disorder where males have an extra X chromosome so their pattern is XXY.

Klinefelter’s Syndrome is not an inherited condition, as it results from an error the occurs during meiosis.

Klinefelter's Syndrome is not inherited from the parents but rather occurs as a result of a random genetic mutation.

One of the effects of the additional X chromosome in Klinefelter’s Syndrome is reduced body hair, breast development and underdeveloped genitalia.

Individuals with Klinefelter's Syndrome may experience delayed or incomplete puberty, resulting in reduced muscle mass and strength.

Individuals with Klinefelter's Syndrome may have difficulties with motor skills, such as coordination and balance.

Many boys with Klinefelter’s Syndrome have problems with coordination and general clumsiness.

Klinefelter’s Syndrome can lead to increased female characteristics and reduced male characteristics such as a smaller penis and testicles.

Boys with Klinefelter’s Syndrome may have trouble using language to express themselves, may be shy and have trouble fitting in.

Males with Klinefelter’s Syndrome are likely to have small testes that produce lower levels of testosterone. This results in a more feminised body shape such as wider hips and more narrow shoulders.

Infants with Klinefelter's Syndrome can be slightly developmentally delayed and have some problems such as poor language skills and lower reading ability.

Klinefelter's Syndrome can also lead to hormonal imbalances, resulting in infertility and potential cognitive and behavioural challenges.

Mosaic Klinefelter’s Syndrome can affect about 1 in 10 people with Klinefelter’s Syndrome but often cause lesser symptoms.

Simpson et al (2003) found that males with Klinefelter’s Syndrome responded well to treatment using male hormones.

Researching Klinefelter’s Syndrome increases our understanding of the disorder, which means that better advice and treatments can be offered to patients.

Studying people with abnormal chromosome patterns improves our understanding of the role of those chromosomes in normal development.

By understanding the behaviour and gender development of males who have an extra X chromosome we gain a greater insight into the role the X chromosome plays on development.

Increased awareness of atypical chromosome patterns have many useful real-world applications such as hormone therapy.

Herlihy et al (2011) studied 87 individuals in Australia with Klinefelter's Syndrome and found those who were treated at a young age benefited significantly in terms of managing their syndrome.

Studying patients with Klinefelter's Syndrome is socially sensitive as there could be negative implications for the individual. It may suggest that there is something wrong with them.

Turner's Syndrome

Turner Syndrome was first diagnosed by Henry Turner in 1938.

Turner Syndrome affects girls.

Turner Syndrome is a chromosome abnormality affecting only females caused by the complete or partial deletion of the X chromosome (XO).

Turner Syndrome is a chromosome abnormality that results in girls having only one complete X chromosome; the other X chromosome is either missing or incomplete.

Girls with Turner Syndrome are missing an X chromosome, so only have 45 in total rather than 46.

Babies born with Turner Syndrome often have swollen hands and feet due to a build-up of prenatal fluid.

Turner syndrome affects the typical developmental changes during puberty where the girl will not have the normal growth spurt and in most cases fail to produce sex hormones such as oestrogen and progesterone.

Turner Syndrome can also be associated with certain health conditions, such as heart defects and kidney problems.

Girls with Turner Syndrome will often have no menstruation cycle (amenorrhoea) and are infertile because of their underdeveloped ovaries.

Some girls with Turner Syndrome develop minor learning difficulties and may have problems interacting with others.

Girls with Turner Syndrome are typically smaller in stature and have a short, webbed neck.

Generally adults with Turner Syndrome are physically immature and tend to retain the appearance of prepubescent girls.

In contrast to Klinefelter's Syndrome a feature of Turner Syndrome is higher than average reading ability.

Individuals with Turner Syndrome may experience difficulties with spatial awareness and motor skills.

Price et al (1986) followed a group of 156 females with Turner Syndrome over a 17-year period. During that time 9% of them died, compared to only 3.6% in a matched sample without Turner Syndrome.

Many of the deaths associated with Turner Syndrome are the result of cardiovascular diseases or problems with the circulatory system.

Hormone replacement therapy has helped patients address some of the physical differences that they experience with Turner Syndrome or Klinefelter Syndrome.

Growth hormone injections are beneficial for some individuals with Turner Syndrome and injections can begin in early childhood.

Oestrogen replacement therapy is usually started at the time of normal puberty in girls with Turner Syndrome.

Quigley et al (2014) found that girls with Turner Syndrome who were given oestrogen therapy in childhood were likely to have more positive female effects in puberty.

Researchers found that providing treatment with oestrogen prior to puberty can help girls to develop at a normal rate. This could be an important psychosocial factor for girls with Turner Syndrome, making them feel more accepted in society.

One strength of research into atypical sex chromosome syndromes is the contribution it makes to the nature versus nurture debate.

Another strength of research is its application to managing the syndromes. Continued research into a typical sex chromosome patterns is likely to lead to earlier and more reliable diagnoses, giving patients a more positive outlook.

Turner Syndrome can be diagnosed prenatally by looking at the features of the developing foetus. This could be considered unethical and socially sensitive, as labelling a foetus as abnormal could lead the parents to seek a termination.

Patients with Turner Syndrome often suffer early ovarian failure and become infertile. One treatment option is to freeze eggs from girls before puberty to enable them to conceive at a later date. This also has ethical implications.

Cognitive explanations of gender development

Kohlberg's theory (gender identity, gender stability & gender constancy)

Kohlberg (1966) proposed a theory of gender development which suggested that children develop an understanding of gender as a result of maturation (as they get older).

The work of Kohlberg is based on the idea of development proposed by Piaget. This states that as the brain develops through childhood, so does the ability of the child to think in more complex and abstract ways.

Kohlberg's cognitive development theory of gender proposes that a child's understanding of gender becomes more sophisticated with age. Like Piaget he argues that as the brain matures, so does thinking and understanding.

Kohlberg (1966) put forward a stage theory of gender development, whereby the child's understanding of gender is constrained by their cognitive ability and cognition that causes the behaviour.

According to Kohlberg children gain an understanding of gender through three stages; gender identity, gender stability and gender constancy.

Each stage of Kohlberg's gender development theory suggests approximate ages and reflects the fact that there is a transition from stage to stage.

Kohlberg's first stage of gender identity is known as the labelling stage where a child develops a basic understanding of the labels 'male' and 'female'.

Kohlberg's first stage of gender identity is at approximately age 18 months to 3 years.

In Kohlberg's gender identity stage children begin to categorise people into male and female groups but their knowledge and understanding of gender labels is weak.

Kohlberg's first stage of gender identity is usually reached by the age of 2. At this stage, the child is able to correctly label themselves as a boy or a girl.

Often children in the gender identity stage of Kohlberg's theory do not view gender as fixed.

Kohlberg's second stage is called gender stability, where children begin to show evidence that they understand that gender labels are fixed. For example they understand that boys become men and girls become women.

Kohlberg's second stage of gender stability is at approximately age 3-5 years.

In Kohlberg's gender stability stage the categorisation of gender is based on superficial characteristics such as clothing and length of hair. A boy who wears a dress may be referred to as a girl.

Kohlberg's second stage is gender stability which is usually reached by the age of 4, when a child realises that gender remains the same across time.

In the gender stability stage of Kohlberg's theory, children have the realisation they will always stay the same gender but cannot apply this logic to other people in other situations.

Kohlberg's third stage this called gender constancy, where children understand that gender remains consistent regardless of physical appearance or changes in clothing or hairstyle.

Kohlberg's third stage of gender constancy is at approximately age 6-7 years.

In Kohlberg's gender constancy stage children become aware of what it means to be male or female and this label is something that remains constant across time and in different situations.

Kohlberg's third stage is gender constancy, which is usually reached by 7 years old. This is when the child starts to understand that gender is independent of external features.

The gender constancy stage of Kohlberg's theory is significant in that children begin to seek out gender appropriate role models to identify with and imitate.

The gender constancy stage of Kohlberg's theory is closely linked with several ideas proposed by Bandura in the Social Learning Theory.

Slaby & Frey (1975) questioned 2–5-year-old children to assess their level of gender constancy. They were classified as either high or low in their understanding of gender constancy and several weeks later were shown a video of males and females performing gender stereotypical activities.

Slaby & Frey (1975) measured the time children spent looking at males and females on a gender stereotypical video. They found children with high gender constancy spent longer watching same-sex role models. This suggests knowledge of gender precedes the watching of same-sex role models behaviour.

Thompson (1975) found that 2-year-olds were able to select same-sex people from a set of pictures suggesting that they could accurately label their own gender. 76% of 2-year-olds demonstrated gender labelling, but this increased to 90% in the 3-year-olds group.

Damon (1977) to children a story about a boy called George who liked to play with dolls. Children were then asked to comment on the story. 4-year-olds said it was fine for George to play with dolls whereas the 6-year-olds thought it was wrong. This shows gender stereotyping.

Damon (1977) suggests that children who have achieved constancy have formed rigid stereotypes regarding gender appropriate behaviour.

Bussey & Bandura (1999) challenge the idea that an interest in gender appropriate behaviour only develops around age 6. They report children as young as four 'feeling good' about playing with gender appropriate toys and 'bad' about doing the opposite.

Evaluation

Support for Kohlberg's theory of gender development comes from research by Slaby & Frey (1975) who interviewed 55 children aged 2-5 years to measure each of the stages. Questions included 'Are you a boy or a girl?' and 'Could you be a girl or a boy if you wanted?'

Slaby & Frey (1975) concluded that cognitive ability does influence gender related behaviour, this is in line with Kohlberg's theory.

Thompson (1975) supports Kohlberg's claim that knowledge of gender is based on maturation. However, also found that children as young as 2 years old could categorise themselves as either male or female, suggesting an understanding of gender occurs long before the age of 7.

Munroe et al (1984) studied the sequence of gender development across different cultures such as Kenya, Nepal, Belize and Samoa.

Munroe et al (1984) found that children worldwide showed similar patterns of gender development as those suggested by Kohlberg, arguing it is a natural process linked to age and stage of development.

Munroe et al (1984) concluded that gender development is universal which supports Kohlberg's stage theory.

Kohlberg's theory of gender development argues that the child actively engages with their social world rather than passively observes it as suggested in the social learning theory (SLT).

Martin & Halverson (1983) found that when preschool children were asked whether their gender would change if their clothing were less gender specific, almost all of them realised their gender would remain the same. This goes against Kohlberg's theory.

Kohlberg's theory suggests that gender specific behaviour only appears after the child has developed gender constancy, however many children prefer gender stereotypical toys before the age of 7.

Bussey & Bandura (1999) challenges the idea that an interest in gender appropriate behaviour only develops around age 6. They report children as young as four 'feeling good' about playing with gender appropriate toys and 'bad' about doing the opposite.

Kohlberg's theory is often criticised for describing the development of gender understanding rather than explaining how it influences gender specific behaviour.

Serbin (2001) claims that Kohlberg may have underestimated the age at which children are aware of gender appropriate behaviour and it could be as early as 18 months.

Kohlberg's theory is a cognitive explanation for gender development and ignores the role of socialisation, including the impact of the environment and culture.

Bem (1989) criticises the methodology used in many studies investigating gender and cognitive development. In her study Bem demonstrated 40% of children aged 3-5 years were able to demonstrate gender constancy when asked to make judgements based on physical differences rather than clothing of an individual.

Bem (1989) argues that the typical way of testing gender constancy may misinterpret what younger children actually know.

Martin et al (2002) suggest there may be different degrees of gender constancy, arguing that the acquisition of constancy may be a more gradual process and may begin earlier than Kohlberg thought.

Gender Schema Theory

Gender Schema Theory is a cognitive explanation of gender development and claims that a child's knowledge of their own gender will determine the type of behaviour they learn.

Like Kohlberg's theory, Gender Schema Theory shares the view the children develop their understanding of gender by actively structuring their own learning.

Gender Schema Theory suggests that children play a more active role in their own gender development from an earlier age.

Gender Schema Theory (Martin & Halverson, 1981) suggest that children begin to develop gender schema around the ages of 2-3 years old. As the child develops, they then assimilate new information into this schema and continue as they experience more gender specific behaviour.

According to Bem (1981) gender schema begins to develop around 2 years old when a child learns that the categories of male and female exist. As the child experiences more about gender the schema develops.

Children develop in-group and out-group schemas based on gender. Their own perception is based on what they understand to be appropriate for their gender and they then categorise others as like them (in-group) or not (out-group).

As children develop gender schemas, they learn to make associations between what is male and what is female, and will categorise objects, toys and activities based on what they think is gender appropriate.

A gender schema is a generalised representation of everything we know in relation to gender and stereotypically gender appropriate behaviour.

A gender schema contains ideas about what is appropriate behaviour for males and females and this can influence children's behaviour.

A schema is a mental representation learned through experience which is stored in memory.

Young children will often have schemas for boys and different schemas for girls.

A schema is a template of information which is stored in memory about a particular object or situation.

A gender schema is information that is stored in memory about what it means to be male or female.

Gender Schema Theory suggests that children acquire an understanding of gender development through experience with the world around them.

Gender Schema Theory claims that once gender identity is gained, the child is motivated to seek gender specific toys and same-sex peers.

According to Martin & Halverson (1981) once a child has established gender identity around the age of 2-3 years, they begin to search the environment for information that encourages the development of gender schema.

The idea proposed by Martin & Halverson (1981) contrasts with Kohlberg's view that the process of understanding gender development only begins after children have progressed through all three stages.

In Gender Schema Theory children around the age of 2-3 years develop schemas for physical differences between the sexes, which leads the child to developing gender specific characteristics and a gender awareness.

At the start of Gender Schema Theory, young children develop an understanding of the categories of male and female and subsequently develop strong gender stereotypes associated with these categories.

In Gender Schema Theory as children grow, knowledge and understanding of gender schema comes from watching the behaviour and attitudes of others.

In Gender Schema Theory, as children learn the more subtle differences between males and females they tend to focus mainly on their own gender.

At around 5 years old, gender roles become more rigid and the child will identify activities and objects associated with their own gender and tend to ignore those that do not fit this schema.

According to Gender Schema Theory in-group and out-group schemas become strengthened as children's knowledge and expectations of gender develops.

By the age of 7 years a child's view of what is gender appropriate behaviour is more flexible, and children will pay more attention to same-sex role models. This is an important part establishing a self-identity.

According to Gender Schema Theory by adolescence the rules associated with gender schema are more flexible and gender appropriate behaviour can be overridden by personal preferences.

Evaluation

Martin & Halverson (1981) found that when shown images of people in different roles, children under age 6 recalled more gender consistent (a male firefighter) than gender inconsistent ones (a male nurse).

Bradbard et al (1986) found children aged 4-9 years were more likely to explore objects labelled for their gender which supports the view that the understanding of gender identity is a deciding factor in toy preference.

Bauer (1993) studied the way in which children call upon gender schemas when processing information. Bauer found that boys are more likely than girls to make use of gender schemas by the age of 25 months.

Campbell et al (2000) studied three groups of babies, age 3 months, 9 months and 18 months using a visual preference technique. 3-month-old babies showed a slight preference towards watching same-sex babies, whereas 9-month-old babies preferred to look at gender specific toys.

Campbell et al (2000) suggests that babies develop gender schemas before they can even talk. They argue that boys have a stronger drive to tune in to their in-group than girls.

Campbell (2004) carried out a longitudinal study of 56 children at 27 and 39 months. The children were asked to point to a girl or a boy, and gender specific toys or activities.

Campbell (2004) found that 53% of 2-year-olds could carry out the gender labelling task and by the age of 3 years, 94% could.

Campbell (2004) found that at the age of 2, 20% of children could stereotype toys and this increased to 51% by the time they were 3.

Campbell (2004) concluded that gender schemas develop rapidly between the ages of two and three years.

Zosuls et al (2009) looked at the onset of gender identity using a longitudinal study of 82 children, where data was obtained twice a week. Through videotape analysis of the children at play, they were able to see that children have a gender identity around 19 months but cannot communicate it.

One strength of Gender Schema Theory is the suggestion that children are active in the development of gender rather than passive recipients as suggested by the Social Learning Theory.

One advantage of Gender Schema Theory over Kohlberg's theory is the inclusion of social and cultural influences on the development of gender. This increases the validity of the theory.

Cherry (2019) argues that gender schema not only influence how people process information but also what counts as culturally appropriate gender behaviour.

Unlike the Social Learning Theory, which states that same-sex role models will be imitated regardless of the type of behaviour shown, Gender Schema Theory explains why same-sex role models demonstrating gender appropriate behaviour are much more likely to be imitated.

Gender Schema Theory is considered reductionist as it fails to account for the influence of biological factors on gender behaviour.

Both Kohlberg and Gender Schema Theory focus on the first seven years of a child's life and ignore puberty when gender identity is most vulnerable.

Psychodynamic Explanation of Gender Development

Freud's Psychoanalytic Theory

Freud (1905) devised a developmental theory which sees children pass through five biologically driven psychosexual stages; oral, anal, phallic, latency and genital.

Freud believed that the psychosexual stages of development were crucial for the formation of gender identity.

Freud's theory of gender development is a psychodynamic explanation suggesting that gender is a product of internal conflicts in the process of psychosexual development.

The psychodynamic theory of gender development suggests that gender identity is acquired during the third stage of psychosexual development; the phallic stage.

Freud suggested that the phallic stage of psychosexual development occurs between the ages of 3 and 6 years.

Prior to reaching the phallic stage children have no concept of gender identity. They have no understanding of male and female, so do not categorise themselves in this way.

According to Freud children become aware of their gender in the phallic stage of development (3-5 years).

As the child enters the phallic stage the focus of the libido moves to the genitals and the development of boys and girls differs.

In the phallic stage of development the energy is centred on the genitals and it is towards the end of this stage following the complexes that gender development occurs.

Complexes and Identification & Internalisation

Oedipus Complex

In male gender development boys enter the Oedipus complex.

The Oedipus complex relates to male gender development, where boys direct their sexual energy towards their mother.

In the Oedipus complex boys develop increasing feelings of love and desire towards their mothers, which in turn causes resentment towards their father as he is seen as a rival.

In the Oedipus complex boys have anxiety which is directed towards their father and they fear castration if their father discovers their sexual feelings for their mother.

Boys experience castration anxiety as part of the Oedipus complex.

Castration anxiety is a psychoanalytical term used to refer to the anxiety experienced by young boys as a result of the rivalry they experience with their father for the affections of their mother.

The frustration of the id instinct results in aggressive feelings being directed towards boys fathers in the Oedipus complex.

In the Oedipus complex boys deal with the conflict by identifying with their father and internalising his behaviour.

In order to resolve the Oedipus complex boys must identify with their father and internalise elements of his identity.

By resolving the Oedipus complex boys have taken on the characteristics of their father's gender identity and internalise this in order to feel able to attract a woman like his mother.

Following the identification and internalisation experienced by boys in the Oedipus complex, Freud suggested that boys have taken on the male gender identity.

Research to support the idea of the Oedipus complex comes from Freud's study of Little Hans.

Freud (1909) suggested that five-year-old Little Hans' phobia of horses was displaced castration anxiety as a result of experiencing the Oedipus complex.

However, the only evidence Freud had to support his concept at the Oedipus complex was the one case study of Little Hans.

Electra Complex

The Electra complex was proposed by the Neo-Freudian Carl Jung.

The Electra complex relates to female gender development, where girls direct their sexual energy towards their father.

In the Electra complex girls develop increasing feelings of love and desire towards their father, which in turn causes resentment towards their mother she is seen as a rival.

The Electra complex suggests that females do not feel complete and experience penis envy.

Penis envy is an anxiety feeling experienced by females upon the realisation that they do not have a penis.

During the Electra complex girls repress their desire for a penis and instead substitute this with the desire for a baby.

In order to resolve the Electra complex girls must identify with their mother and in doing so internalise aspects of her gender role identity.

When girls identify with their mother in the Electra complex, they feel able to attract a male partner like their father in the future.

Following the identification and internalisation experienced by girls in the Electra complex, Freud suggested that girls have taken on the female gender identity.

To complete gender development children must identify with their same-sex parent to reduce unconscious anxiety and internalise their moral standards to adopt their parents personality traits.

Freud's theory suggests that children of both sexes identify (identification) with the same-sex parent as a way of resolving their complexes. When children adopt the gender identity of the same-sex parents, Freud called this internalisation.

Evaluation

The psychodynamic explanation of gender development is supported by clinical case studies such as Little Hans.

Rekers & Morey (1990) support the idea that most children are raised by at least one same-sex parent. They rated the gender identity of 49 boys aged 3-11 years based on interviews with their families and the children themselves.

Rekers & Morey (1990) argue that in 75% of boys judged to be 'gender disturbed' had neither their biological father nor a substitute father living with them. This lack of a male role model may have had and negative impact upon their gender identity.

Rekers & Morey (1990) support Freud's theory that for normal gender development boys must be raised by at least one male parent. Having no male role model could result in a negative impact on gender identity.

Bos & Sandfort (2010) compared data from 63 children where both parents were lesbians and 68 children from 'traditional' families. Children raised by lesbian parents felt less pressure to conform to gender stereotypes and had no differences in terms of psychosocial adjustment or gender identity.

Bos & Sandfort (2010) contradict Freud's theory by suggesting that fathers are not necessary for healthy gender identity development.

Case studies include subjective data collection and data analysis which limits their generalisation.

Freud has been criticised for the lack of scientific rigour in his research methods, and for many of these concepts which are untestable because they are largely unconscious.

Karl Popper (1959) argues that Freud's psychodynamic theories are pseudo-scientific and cannot be falsified, which questions the validity of his ideas.

Freud's theories lack adequate accounts of female development, which limits its validity.

Much of Freud's research in the psychodynamic explanation is androcentric.

Honey (1942) argues that a more powerful emotion than penis envy is 'womb envy' – a reaction to women's ability to nurture and create life.

Both the Electra and Oedipus complex were theoretical ideas put forward by Freud but there is no way of testing them scientifically. However, we are unable to falsify these ideas, so have to accept their existence.

Psychodynamic explanations for gender development lack temporal validity as they reflect the stereotypical gender roles in the early 1900s, which do not represent society today.

Contrasting theories of gender development such as the cognitive explanation have more scientific credibility, as these ideas can be tested experimentally.

Cognitive theories of gender development such as that of Kohlberg suggest that gender gradually develops as a child's cognitive capacity increases. This is in contrast to Freud's psychodynamic explanation which claims that gender is acquired all at once.

Social Learning Theory as Applied to Gender Development

According to the Social Learning Theory (SLT) most behaviours are learned through a process of observation and imitation. Reinforcement also plays a part in whether people choose to imitate others or not.

The Social Learning Theory (SLT) acknowledges the role that the social context plays in gender development.

The Social Learning Theory (SLT) draws attention to the influence of the environment in shaping gender development. This supports the nurture debate.

Studies from the Social Learning Theory (SLT) show that we are more likely to imitate people if the behaviour is rewarded, this can be direct or vicariously through a role model.

Direct reinforcement such as praise, attention or encouragement can be used to help children develop stereotypical gender appropriate behaviour.

Indirect reinforcement (vicarious) promotes gender appropriate behaviour by rewarding another person's behaviour, which is subsequently imitated.

The Social Learning Theory (SLT) explains gender development by emphasising the importance of other people in the learning of gender roles.

According to the Social Learning Theory (SLT) learning takes place through observation and imitation. Modelling can also play an important role in gender development.

Modelling in the Social Learning Theory (SLT) is the precise demonstration of a behaviour that may be imitated by an admiring observer.

Children who identify with role models are more likely to imitate their gender specific behaviour.

According to the SLT the understanding of gender roles is the product of observational learning. Once children are aware of their own gender, they begin to imitate the behaviour that they see as most appropriate.

Children will imitate both gender appropriate and gender inappropriate behaviour, but the way this is reinforced by others will determine which behaviours they choose to imitate again.

Role models are the people that children take the most notice of as they often aspire to be like them. Initially parents are the primary role models for children as they observe their gender roles at home.

Gender appropriate behaviour can be directly reinforced by parents or family members by encouraging specific behaviours at home.

Fagot (1978) observed children at home playing with parents and found that boys and girls were reinforced for different behaviours. Boys were positively reinforced for playing with male toys and were punished for playing with female toys such as dolls.

Fagot (1978) supports the claim that parents shape gender appropriate behaviour, suggesting that girls are positive reinforced to take on female gender roles, whereas boys are positively reinforced to take on male gender roles.

Langlois & Downs (1980) found that when children were playing with opposite gender toys, their same-sex friends were less tolerant than their mothers. They found that boys were often made fun of by their peers.

Maccoby (1990) found evidence that young children often play together in same-sex pairs or groups and avoid mixing with the opposite sex during play. This suggests that gender behaviour is likely to be influenced by interactions with others, and this begins in childhood.

Children can be influenced by indirect reinforcement through observing others, who are being reinforced, such as siblings or peers. This is known as vicarious reinforcement.

Vicarious reinforcement can encourage gender appropriate or gender inappropriate behaviour.

The Social Learning Theory (SLT) was proposed by Bandura (1961) as a result of his experiments into observational learning and modelling.

Bandura (1977) suggested 4 cognitive processes which were central to social learning theory; attention, retention, reproduction and motivation.

The stages of social learning outlined by Bandura (1977) can be used to help explain how children acquire gender appropriate behaviours.

In Bandura (1977) the stage of attention explains that children are most likely to pay attention to a same-sex model.

The stage of retention in Bandura (1977) suggests the children have the ability to form a mental representation of the observed behaviour and recall it at a later date.

In the reproduction stage of Bandura (1977) children use the mental representation of the observed behaviour, which they have stored in their memory and put it into practise.

In Bandura (1977) the motivation stage argues that the child needs to be motivated in order to model the behaviour they have observed.

Fagot & Leinbach (1989) used a longitudinal study of gender development to find a tendency for parents to encourage gender stereotypical behaviour in their children.

Fagot et al (1992) measured the effects of parenting style and children's later gender roles. They found children in traditional families tended to use gender labels much earlier and showed more gender role stereotyping.

Evaluation

Social Learning Theory does take into account cognition in the process of learning gender roles. There is an element of free will in the gender roles that are selected.

Smith & Lloyd (1978) offer support for the Social Learning Theory (SLT). They suggest that gender appropriate behaviour is secured at an early age through differential reinforcement.

Differential reinforcement is the way in which boys and girls are encouraged to show distinct gender appropriate behaviours.

Smith & Lloyd (1978) observed how people responded to babies dependent on what clothes they were wearing. If babies were dressed as girls, they were more likely to be told they were pretty and be handed a doll to play with.

Like the psychodynamic explanation, the Social Learning Theory (SLT) makes reference to the importance of identification in gender development.

The Social Learning Theory (SLT) fails to account for biological influences on gender role behaviour.

In some social observations boys are encouraged to be more active during play, but this may be a consequence of the fact that they are naturally more active due to hormonal differences. It may not be the result of differential reinforcement.

The Social Learning Theory (SLT) can explain cultural changes in stereotypical gender appropriate behaviour. For example, it is acceptable today for children to display androgynous characteristics.

The Social Learning Theory (SLT) has difficulty explaining how children's understanding of gender changes over time.

It is believed that cognitive processes play a greater role in the learning of gender than the social learning theory allows. However, Bandura (1977) did account for this in his ARRM theory.

Some aspects of gender role behaviour appear to be universal for all cultures; however these social norms are subject to change over time.

Universal features of gender development often accommodate for innate influences in gender roles. For example, more females take on nurturing gender roles, which could be the result of biological influences.

The Social Learning Theory (SLT) does not provide an adequate explanation of how learning processes change with age.

The Influence of Culture & Media on Gender Roles

Culture

Culture can be defined as a set of beliefs, attitudes and behaviours that separates one group of people from another. Several aspects of gender identity and gender role can differ cross culturally.

Cultural norms and values influence the development of gender identity and the expectations placed on individuals based on their assigned sex.

Gender identity can be shaped by cultural beliefs about masculinity and femininity, leading to variations in how individuals perceive and express their gender.

Different cultures can vary in their expectations of male and female behaviour. Western cultures recognise 2 gender roles; masculine and feminine.

Gender roles can differ across cultures, with some societies having more rigid expectations for males and females, while others may have more fluid or non-binary gender roles.

Gender is seen as a social construct, meaning that society creates many of the differences seen between males and females.

The stereotypes associated with masculinity and femininity can differ across different cultures.

Cultural research is carried out to show similarities between gender roles in different cultures and differences between cultures in stereotypical behaviours.

Cross-cultural studies help to offer conclusions about whether biology or socialisation is responsible for gender roles.

Mead (1935) studied the gender roles of cultural groups in Papua New Guinea. She found the Arapesh tribe were gentle and responsive, similar to the stereotype of femininity. Whereas the Mundugumor tribe were aggressive and hostile, similar to the stereotype of masculinity.

Mead (1935) suggested that gender roles maybe culturally determined, and there may not be a direct biological relationship between sex and gender.

Cross-cultural research offers a valuable contribution to our understanding of the nature versus nurture debate in gender development.

Buss (1995) highlighted cross-cultural similarities in gender roles and found consistent patterns in mate preferences of males and females. Buss studied partner preferences across 37 countries and in all cultures, women sought men who could offer wealth and resources whilst men looked for youth and physical attractiveness.

Munroe & Munroe (1975) revealed that in most societies the division of labour is organised along gender stereotypical lines, with men typically taking the role of breadwinner and women the role of nurturer.

When studying cross-cultural differences of gender development there are two different cultures to consider; traditional cultures and egalitarian cultures (where gender roles are more flexible and equal).

Mead (1935) observed the behaviour of three groups in Papua New Guinea and found interesting differences in gender roles compared to those in western society.

Mead (1935) found the Tchambuli people of Papua New Guinea to have gender roles which were the reverse of those in western society. Women were more masculine and men were more feminine. This suggests that gender roles are culturally determined.

LaFromboise et al (1990) found that in North American tribes, the roles of men and women did not always reflect western traditional roles. For example women would often take on aggressive roles and be involved in fighting.

Talbani & Hasanali (2000) found South Asian girls growing up in Canada felt their families were disappointed if they did not comply with the male dominated expectations of their society, suggesting cultural pressure may encourage gender behaviour.

Some research argues that elements of gender roles and gender attitudes are universal concepts and do not vary cross-culturally.

Williams & Best (1990) studied gender stereotypes in 30 countries and found universal attitudes towards masculinity and femininity.

Gathering cross-cultural research can be problematic as some of the methods used to gather data from one culture are not necessarily applicable to another culture.

Using gender-based questionnaires which are designed in western culture may make assumptions about the gender roles of those in other cultures. This results an ethnocentric bias.

Cultural bias is an issue when studying gender development because most of the research is carried out in western society.

Freeman (1983) conducted a follow-up study of people from Papua New Guinea, looking at gender roles, following Mead's research. He argued that her findings were flawed as she had been misled by some of her participants and her preconceptions of what she would find influenced her reading of events.

Freeman (1983) suggested that Mead's interpretations may not be objective and calls into question the conclusions she drew about cross cultural variation in gender roles.

Research suggests there are cultural differences in gender roles, which shows the effect of social factors however, it is equally important to consider biological influences.

Hofstede (2001) argues that in industrialised cultures the changing status and expectations of women are a function of their increasingly active role in the workplace and away from the domestic home. This has led to a breakdown of traditional gender stereotypical roles.

Cultural explanations of gender development are reductionist in that they fail to account for biological explanations.

Media

The media has a powerful influence on our behaviour as we are continually exposed to it through newspapers, television and social media.

The media will often portray males and females in particular ways depending on the culture or society they are in.

The media provide role models with whom children identify and want to imitate. Many children select role models which are the same sex as they are and prefer to show gender stereotypical behaviour.

Bussey & Bandura (1999) suggest that the media provide clear gender stereotypes, as men are often seen as more independent and ambitious, where women are seen as more dependent.

The media can play a role in reinforcing widespread social stereotypes concerning gender appropriate behaviour.

Furnham & Farragher (2000) found that men were more likely to be shown in TV adverts in roles that are more professional, whereas women were more likely to be seen in domestic roles.

The media's reinforcement of traditional gender roles and expectations can contribute to the marginalisation and inequality of women in society.

From a young age children are exposed to media representations of gender stereotypes. These are evident in children's books and on television programmes.

Characters from books, films and TV are often early role models for children. In line with the SLT explanation of gender, children will identify and model themselves on these characters.

If the characters shown to children are demonstrating stereotypically male or female behaviour children will take note of this and learn from it and will also imitate this in the future.

If parents demonstrate stereotypical gender roles in the home, the media may reinforce these by portraying them as normal.

The effect of the media on behaviour is connected to the principle of social learning, often using vicarious reinforcement. It also emphasises the importance of modelling and the influence of role models.

As in the SLT if characters in books or on TV are rewarded for gender appropriate behaviour, these attributes are assumed to be positive and therefore are more likely to be imitated.

Williams (1981) reported evidence from a natural experiment conducted in a town in Canada. Prior to the introduction of TV in the town the amount of gender stereotypical views were relatively low. Two years after TV was introduced the difference between boys and girls had increased and there were significantly more stereotypical views related to gender.

Williams (2007) found gender role differences in advertisements, where males were portrayed in adverts for cars and technical items compared with females who were portrayed in adverts for beauty and cleaning products.

Hopper (2005) found that teenage girls were more likely to read magazines than teenage boys, which may explain why a higher proportion of magazines are seemingly directed towards girls.

Cultivation theory argues that the more time individuals spend ‘living’ in the media world, the more likely they are to believe that this reflects reality.

Bond & Drogos (2014) found a positive correlation between time spent watching the reality TV programme Jersey Shore, and permissive attitudes towards casual sex.

Bond & Drogos (2014) suggest that the media cultivates a perception of reality and this affects our gender behaviour.

Bee (2000) found that children's books often showed males and females in stereotypical roles and adverts were also often differentiated.

It is over simplistic to assume that children passively learn their gender role from watching TV and reading books. They have free will to choose which characters become their role models.

Understanding the role of the media in continuing gender stereotyping has led to efforts to show more balanced gender roles in children's media.

England et al (2011) show that traditional Disney Princess roles were very feminine but recently Disney has produced more Princess roles that are balanced and less stereotypically female.

The media can have a positive effect on gender role stereotypes, for example televising the women's football World Cup can encourage more females to play sports. This increases the validity of the explanation as it shows the effects the media has on real life.

Research into media effects on gender roles is mainly correlational, so cause and effect cannot be established.

Durkin (1985) argues that even very young children are not passive recipients of the media. If media representations confirm existing gender norms held by the family, then these are likely to be reinforced in the child's mind.

Some studies provide evidence for counter-stereotypes. Pingree (1978) found that gender stereotyping was reduced amongst school age children when they were shown TV adverts featuring women in non-stereotypical roles.

Atypical Gender Development

Gender Identity Disorder

Gender identity disorder (GID) is sometimes referred to as gender dysphoria. This is an example of typical gender development.

Individuals who have gender dysphoria do not identify as their sex given at birth. The experience of gender dysphoria is up from a source of stress and discomfort and is recognised as a psychological disorder.

Gender identity disorder (GID) is a feeling of mismatch between anatomy and gender identity.

Gender dysphoria is defined by strong, persistent feelings of identification with the opposite gender and causes anxiety with one's own assigned sex.

Gender dysphoria is the term commonly used in classification systems for the diagnosis of gender identity disorder.

The experience of gender dysphoria has to be present for at least two years, along with an individual's insistence that they are of the opposite sex.

Gender identity disorder or gender dysphoria is characterised by feelings that a person's psychological gender is not the same as their physical status of being male or female.

An individual with gender identity disorder has a conflict between their biological sex and their psychological gender identity.

Individuals with gender identity disorder may show early signs through an unwillingness to dress as a boy or a girl but can eventually lead to feelings of disgust with their own physical appearance.

Referring to gender identity disorder suggests that it is a 'disorder' or illness and by doing so implies that there is a specific gender that applied to men and another for women. This has led to a change in label to become gender dysphoria.

Biological & Social Explanations for Gender Identity Disorder

Biological

Biological explanations for gender identity disorder have found differences in the brain associated with sexual behaviour.

One biological explanation for gender dysphoria has a basis in brain structure, in particular with the size of the bed nucleus of the stria terminalis (BNST).

The bed nucleus of the stria terminalis (BNST) is a structure in the brain involved in emotional responses.

There is some suggestion that the bed nucleus of the stria terminalis (BNST) is implicated in the biological explanation of gender dysphoria. It is believed that people with gender dysphoria have a BNST which is the size of the gender they identify with, not their biological sex.

Research has found that the BNST, which is a part of the hypothalamus in the brain, is larger in typical males than those with gender identity disorder.

Kruijver et al (2000) found the BNST area of the brain to be larger in men than women and suggest it has been found to be female sized in transgender women.

Zhou et al (1995) suggested problems with the BNST fits with reports made by people who are transgender that feel from an early age they are born the wrong sex.

Zhou et al (1995) found that in a small sample of male to female transsexuals there was evidence of brain activity more typical of females than males.

Garcia-Falgueras & Swaab (2008) found that in male to female transsexuals there was an area of the hypothalamus that was more similar to the same area in female controls. This suggests that brain structure may resemble the gender they feel they are.

There are many challenges made to the brain sex theory of gender dysphoria, which limits its credibility as an explanation.

Hulshoff Pol et al (2006) studied changes in transgender individuals' brains using MRI scans taken during hormone treatment. The scans showed the size of the BNST changed significantly over a period of time.

Most of the studies investigating the structural differences in the brain of individuals with gender dysphoria are the result of post-mortem examinations. These are less reliable than brain scans where patients are alive.

In contrast, some research evidence suggests there may be other brain differences associated with gender dysphoria.

Rametti et al (2011) studied the white matter in the brains of males and females. This is the deeper tissue of the brain. They found that the amount and distribution of white matter corresponded more closely to the gender individuals identified as, rather than their biological sex.

Much of the research into biological factors associated with gender identity disorder focus on genes and hormones.

Research into the influence of prenatal hormones have shown issues with the production of the male hormone androgen, in determining gender dysphoria.

Zucker & Green (1992) suggest that problems with gender dysphoria can arise when androgen is not produced or cell receptors do not respond to it.

There is evidence that some males with gender identity disorder have inherited androgen receptors that are not sensitive to male hormones such as testosterone.

Hare et al (2009) found evidence a variant of the androgen receptor gene that caused a reduced effect of testosterone, was seen more often in male to female transsexuals.

Chung et al (2002) argued that prenatal hormonal influences might remain dormant until adulthood where they subsequently trigger a change within the individual. They suggest this may account for the higher proportion of males diagnosed with gender identity disorder.

Many individuals with gender dysphoria choose to change their gender identity and often respond well to hormone therapy both before and after surgery.

The fact that hormones can help people to transition from male to female or female to male, suggests that hormones play a fundamental role in gender identity.

By studying the influence of hormones in gender dysphoria, more practical applications such as treatments can help individuals in the future.

Some psychologists suggest there may be a genetic prevalence to gender identity disorder.

The genetic explanation for gender dysphoria looks for inherited characteristics that run in families or in the concordance rate of twins studies.

Coolidge et al (2002) assessed 157 twin pairs for evidence of gender dysphoria. They found that 62% of the variance could be accounted for by genetic factors, suggesting a strong heritable component.

Heylens et al (2012) compared 23 MZ twins with 21 DZ twins where one of each pair was diagnosed with gender dysphoria. They found 39% of the MZ twins were concordant for gender dysphoria compared to none of the DZ twins.

Bennett (2006) reported that genetic processes involved in gender identity disorder, were found in 2% of the sample in more than 300 MZ and DZ twins.

Pool et al (2000) found evidence for a neurobiological basis for gender dysphoria. They claim that men have twice as many somatostatin neurons than women.

According to Pool et al (2000) somatostatin neurons promote certain behaviours, specifically risk-taking, exploration/ adventure, and decision making. This might explain why men have more of these skills than women.

Pool et al (2000) found that in both male to female transsexuals and female to male transsexuals, the number of somatostatin neurons corresponded to their gender of choice.

The biological explanation of gender identity disorder ignores the role that social or psychological factors play in the feelings of gender confusion.

The biological explanation of gender identity disorder is reductionist as it fails to take into account other factors which may play a part in gender identity.

Males appear to be five times more prone to gender identity disorder than females, this could be the result of biological vulnerability and provides strong support for the biological explanation.

In contrast many research studies today have shown that cross-gender behaviour starts very early in childhood, suggesting a strong social or cultural link to gender identity disorder.

Social

Social explanations for gender identity disorder centre on maladaptive learning experiences and dysfunctional cognitive processes.

Some psychologists claim the gender identity disorder can be explained by social factors such as reinforcement and role models.

Gender identity disorder can be explained by reinforcement given by people such as parents or peers.

In early childhood many children experiment with gender roles as they learn what gender is all about. Positive reinforcement encourages children to adopt gender specific behaviours.

Some psychologists argue that gender identity disorder could be the result of a lack of suitable same-sex role models. This idea supports the Social Learning Theory (SLT).

Rekers (1995) found a common feature associated with gender dysphoria in a group of 70 young boys was that they had a lack of male role models.

However, correlational studies do not necessarily imply that the absence of a male role model in early life causes gender identity disorder.

Gladue (1985) found there was little difference in the hormone levels of males with cross-gender feelings, compared with those who identified as homosexual and those who were heterosexual. This suggests the social factors maybe more influential than hormones.

Many people with gender identity issues show signs in early childhood, suggesting a social explanation because children are likely to be very responsive to the behaviours of others around them.

It is plausible to believe that small children could easily be shaped by parental reinforcement and role models, and this could impact on their gender identity.

One social explanation of gender dysphoria is the idea of social constructionism.

The social construction perspective argues that gender identity does not reflect underlying biological differences and that these concepts are created by society.

For individuals who experience gender dysphoria, the gender 'confusion' arises because society forces people to be either a man or a woman, and people must act accordingly.

According to the idea of social construction gender dysphoria is not a pathological condition put more a social phenomenon.

Not all cultures have two genders, Samoa recognises a 3rd gender; fa'afafine, these people have fluid gender roles that move between male and female ideals.

Nonbinary classifications of male and female are increasing in number suggesting that gender is culturally constructed.

Parents with a strong desire for a child of the opposite sex might reinforce gender inappropriate behaviour. For example mothers may praise young boys for wearing girls' clothing (di Ceglie, 2000).

Gender identity disorder is a socially sensitive area of research and it could be argued that the social explanations place blame on the families.

Some social explanations for gender identity disorder include the psychodynamic view, that issues with gender identity are developed because of conflict in childhood.

Ovesey & Person (1973) emphasise social relationships within the family as the cause of gender dysphoria.

Ovesey & Person (1973) argue that gender dysphoria in biological males is caused by a boy experiencing extreme separation anxiety before gender identity has been established.

The explanation by Ovesey & Person (1973) does not provide an argument for gender dysphoria in biological women, as the theory only applies to transgender women.

Stoller (1973) reported that, in interviews, biological males with gender dysphoria displayed overly close relationships with their mother. This suggests a stronger female identification and more conflicted gender identity in the long term.

Research has suggested that issues with gender identity could be related to attachment between a mother and child.

Coates & Person (1985) suggest when a severe form of separation anxiety is found in males, who remain psychologically attached to their mother, they can develop a gender identity to replace the mother.

According to Coates & Person (1985) to reduce the anxiety associated with gender dysphoria children may imitate their mother by cross-gender behaviour.

Rekers (1986) found that gender dysphoria in those assigned male at birth is more likely to be associated with the absence of a father figure, not separation from their mother.

The psychodynamic explanation of gender dysphoria does not provide a comprehensive account.

It is likely that gender identity disorder is influenced by both biological and social factors.

Gender identity disorder is intensified during puberty when hormonal changes alongside social and emotional changes are taking place. This would imply there is an interactionist explanation.

Some individuals who experience gender dysphoria will decide to have gender reassignment surgery.

A significant proportion of people who experienced gender dysphoria in childhood do not do so as adults. Drummond et al (2008) followed a sample of 25 girls who were all diagnosed with gender dysphoria in childhood, only 12% were still classified when followed up at age 24.