

GENDER

biological influences on gender development: genes & hormones

genes	hormones
<ul style="list-style-type: none">▶ biological sex determined at conception by sperm<ul style="list-style-type: none">◦ females have a pair of X chromosomes - XX◦ males have both X & Y chromosomes - XY◦ egg contributes X chromosome◦ sperm contributes X or Y chromosome<ul style="list-style-type: none">- determines sex▶ up until 6 weeks, all foetuses contain undifferentiated gonads, made up of 2 systems:<ul style="list-style-type: none">◦ Wolffian system<ul style="list-style-type: none">- precursor to the male sex organs- Y chromosome produces protein - causes gonads to become testes◦ Mullerian system<ul style="list-style-type: none">- precursor to the female sex organs- Y chromosome protein not present - gonads develop into ovaries	<ul style="list-style-type: none">▶ once gonads have developed, further sexual development & sex differences triggered by sex hormones<ul style="list-style-type: none">◦ testes present = androgens released (testosterone & dihydrotestosterone)<ul style="list-style-type: none">- prenatally - influence development of male organs - Wolffian system develops<ul style="list-style-type: none">> masculinise the brain<ul style="list-style-type: none">▶ testosterone slows down & speeds up development of some parts of brain▶ testosterone increases size of the sexually dimorphic nucleus<ul style="list-style-type: none">◦ explains why men are better at spatial tasks & women better at verbal tasks◦ right hemisphere concerned with spatial ability- postnatally - activate sex organs during puberty- if not present, Mullerian system develops<ul style="list-style-type: none">> no hormones needed for female sex organs/ reproductive system to develop

REDUCTIONIST

- ▶ fails to recognise role of **environmental factors** that influence gender
- ▶ biology can't be only shaping factor in gender development
 - **gender differences** between **cultures**
 - cross cultural differences must have other causes than biology
 - all have the **same biological mechanisms** influencing gender
 - therefore can't be the only factor affecting gender differences

DAVID REIMER - gender reassignment

- ▶ born healthy male baby along with identical twin
- ▶ 8 months old when penis was removed in a circumcision that went wrong
- ▶ parents were advised to raise as a girl
 - 22 months he had his testes removed
 - during puberty was given oestrogen
 - age 13 was suffering from depression
- gender identity not female - unhappy being raised as a girl
- age 14 told about his gender reassignment - decided to revert to being male
- ▶ *supports theory as despite being nurtured as a female, still identified as male*
 - *shows nature (genes) play stronger role in gender development than nurture (upbringing) as unaware of being male*

- + natural experiment
 - high ecological validity
- + low external validity
 - case study - not generalisable or replicable
- low internal validity - raised 22mths as male
 - critical stage in gender identity
 - could have influenced gender development
 - twin brother may have socialised him to become more male

DIAMOND - rats

- injected pregnant rats with testosterone
 - female offspring male like genitals & attempted to mate with other females

GORSKI - rats SDN

- repeated Diamond's study
 - female offspring had sexually dimorphic nucleus same size as males

YOUNG - monkeys

- female monkeys exposed to male hormones in prenatal development showed more rough & tumble play compared to females not exposed to male hormones

- *studies support theory that hormones have an impact on gender development*
 - *high testosterone levels created female offspring that exhibited male behaviour & physiology*
 - *normal levels of testosterone developed normally as females*
- + lab studies
 - high scientific validity
 - standardised procedure - replicable & objective
- animal studies
 - low population/external validity
 - ethical issues

- + overall, consistent findings lend reliable support for theory
- however, research does not rule out role of nurture
 - identified link between biology & gender development, but little known about environment
- animal studies
 - can't generalise fully due to different species & genetic makeup
 - however, does show a clear link between testosterone & gender
 - still partially supports theory
- + results still offer good support the theory - no other way to test scientifically

SOCIAL SENSITIVITY

- very hard to research the role of genes in gender development
 - **unethical** to **manipulate**/challenge someone's sex or gender
 - very sensitive & **personal topic**
 - most gender development happens before puberty - children can't consent
- not ethical to manipulate hormones & genes in humans, so **animals** used
 - ethically it is unreasonable to put animals through
 - still living beings & unable to consent
 - difficult to generalise results = difficult to validate animal testing

evolutionary approach to gender development: parental investment

<p>▶ parental investment</p> <ul style="list-style-type: none"> ◦ anything parent does to increase the offspring's chances of survival & reproduction ◦ at the cost of the parent's evolutionary fitness in other areas ◦ minimum parental investment required from: <ul style="list-style-type: none"> - father = time taken to get a female pregnant - mother = 9 months of pregnancy <ul style="list-style-type: none"> > during this time the father can potentially father many other children > women have more vested interest in making sure child survives compared to men <p>▶ the differing level of initial parental investment affects gender roles</p>		
<p>▶ parental care</p> <ul style="list-style-type: none"> ◦ breast feeding <ul style="list-style-type: none"> - infants of early humans breast fed until the age of 2 to survive - women obliged to care of small children ◦ dependancy of child <ul style="list-style-type: none"> - human children extended period of childhood - born relatively immature to allow child birth - dependant on a carer ◦ time & energy <ul style="list-style-type: none"> - women spend much time & energy on pregnancy, birth & care for a child they know is theirs - adaptive for fathers to spend less time & energy on parental care 	<p>▶ mate selection</p> <ul style="list-style-type: none"> ◦ fertility & faithfulness <ul style="list-style-type: none"> - needed by men to ensure child is theirs - men need to select an appropriate mate & ward off competition <ul style="list-style-type: none"> > judge fertility by assessing physical appearance (young, attractive & healthy) - in men's interest to have many sexual partners - can father limitless amounts of children ◦ investment of resources <ul style="list-style-type: none"> - needed by women to ensure offspring's survival - women less to gain from infidelity = more likely to remain faithful 	<p>▶ sexual jealousy</p> <ul style="list-style-type: none"> ◦ aggression <ul style="list-style-type: none"> - to be a good provider & protector (& ward off competition) men show a higher level - can never be sure child they are spending resources on is theirs - technique to guard the partner's faithfulness

DETERMINISM

- ▶ theory states men & women always going to act a certain way that is in line with their **set adaptive response** to parental investment & gender
 - “men will always mate with younger women” & “women will always mate with richer men”
- ▶ suggests behaviour is determined through evolution & **no free will** is involved

BUSS - 37 cultures

- ▶ surveyed 37 cultures in 33 countries, 10,000 participants
- ▶ asked to rate age, intelligence & sociability on how important they were in a sexual partner
 - men = physical attractiveness more important
 - women = good earning power & high occupational status more important
 - all cultures = both preferred man to be older
- ▶ *supports theory*
 - *men valued physical attractiveness more = looking out for the fertility of the women*
 - *women valued earning & status = need to guarantee survival of offspring*
 - *preference for the man to be older = men desire fertile women/women value resources & protection*

- + cross culture
 - shows universal behaviour - behaviour is an adaptive, evolutionary response
- + large varied sample
 - high external/population validity
- self report survey
 - social desirability/researcher bias - reduced internal validity

ANDERSON - college tuition

- ▶ willingness of men to pay for children's college education as a means of assessing parental investment
 - most willing to pay for their child when still living with the mother
 - however, did not discriminate financially between children & step children

- ▶ *some support to theory - men provided resources for their offspring*
- ▶ *however, did not discriminate resources against children not biologically theirs*
 - *goes against theory of resource investment*
 - *maybe trying to impress women & not the parental investment*
- > observation
- + natural results - no researcher effects
- can't determine cause & effect - possible EVs

- overall, difficult to test the theory empirically & whether behaviours are adaptive
 - can only assume how gender roles developed through evolution - no evidence
- therefore not very convincing - must be other factors explaining gender development better
 - biological theory - much physical evidence that hormones & brain physiology directly linked to gender differences

SOCIAL SENSITIVITY

- ▶ very **rigid & outdated** view of gender roles
 - males have no role of care/emotional attachment to child
 - women must be primary caregiver/rely on men to provide/shouldn't do anything but fulfil motherhood roles
- ▶ does not support idea of **paternity leave** - fathers have no other investment but resources

evolutionary approach to gender development: empathising-systemising theory

- Baron Cohen
- **female brain** hard wired for **empathy**
 - > cognitive skill for identifying other's emotions & thoughts & responding with appropriate emotion
 - > evolutionary advantage to female carers
 - more sensitive to needs of child
- **male brain** hard wired for **systemising**
 - > skills such as finding out, building & predicting systems
 - > evolutionary advantage to hunter-gatherers
 - more instinctive in hunting skills
- systemising & empathising depend on **different regions** in the brain
 - > **autism** = extreme male brain - maximum systemising, minimal empathising

DETERMINISM

- states that men & women will always **act** in a **certain way**
 - in line with how brain biologically determined to display certain characteristics/gender differences
- issues with **social sensitivity**
 - very **rigid** & **outdated** view of gender roles
 - suggests men unable to be empathetic & females not good at systemising
 - untrue as each characteristic shown by each gender to some extent
 - doesn't explain why some women don't want children

BAKTI - babies & mobiles

- researchers not told sex of baby
 - babies shown a human face & a mobile
 - length of time baby spent looking at each
 - videoed to show where they looked & analysed data
 - boys spent more time looking at mechanical object (mobile)
 - girls spent more time looking at human face
 - *supports theory as shows innate response to empathising/systemising disposition of brain*
 - *boys = mobile = innate response to systemising//girls = face = innate response to empathising*
 - *shows gender differences due to inherited cognitive differences which are adaptive responses to evolutionary gender roles*
- + highly controlled lab experiment
 - allowed accurate measures & replicable method
 - high external validity
 - researcher bias - low internal validity
 - looking for results supporting theory
 - however, controlled by hiding gender

BARON COHEN

- questionnaire to assess ability to empathise & systemise
 - males score higher on systemising quotient
 - females score higher on empathising quotient
 - some score higher on opposite
 - *generally supports theory as genders aligned with predicted quotient*
 - *shows clear divide between stereotypical gender behaviours*
 - *may be due to brain differences in biological sexes*
 - *however, not always true*
- researcher bias - low internal validity
 - own theory, so may have looked for/manipulated results
 - > questionnaire
 - + quantified systemising/empathising - objective measure
 - social desirability bias

- + overall theory has reliable research support due to consistency
- however, low validity
 - researcher bias - internal validity
 - lab conditions - external validity

SOCIAL INFLUENCE

- differences could be better explained by the way each **gender** is **stereotypically nurtured**
 - some show higher levels of men empathising//females systemising
 - cultural differences show nurture
 - environmental factors involved

biological influences on gender development: biosocial approach

- ▶ focuses on the **interaction** between biological & social factors
 - **biology = foundation** on which social factors built
 - emphasises **social factors** as cause for **gender differences**
- ▶ innate characteristics, **sex & behaviour** of newborn **affect** way **carers** behave towards them
 - behave differently whether the baby is male or female
 - **female** babies
 - > may act more **passively** = may make the carer interact more calmly
 - ▶ shapes baby's behaviour into more 'female' gender roles
 - **male** babies
 - > may appear more **boisterous** = may be treated differently & given different toys to play with
 - ▶ shapes the baby's behaviour into more 'male' gender roles
- ▶ argues that child's **gender identity** consistent with way it's been **raised** - subtly different in boys & girls
- ▶ acknowledges that gender is **flexible**
 - what it means to be male or female changes over **time & culture**
 - therefore how gender of a child is constructed varies according to time & place raised

NATURE/NURTURE

- ▶ **emphasises** role of **nurture**
 - focuses on role that a carer plays in determining child's gender
 - socialisation stronger impact than biological factors/sex
- ▶ **recognises nature**/biological factors/sex are the **foundation** of socialisation
 - thus nature has some role to play in gender development

SMITH & LLOYD - babies dressed opposite

- ▶ studied how adults treated babies differently according to their perceived gender
- ▶ dressed & named 6 month infants as the opposite sex
- ▶ asked adults to play with them
 - adults used name & clothing to prompt interaction & toy choice
 - babies perceived as boys given hammer
 - babies perceived as girls given dolls
- ▶ *supports theory as adults treated babies differently according to gender*
 - *shows sexes are socialised differently according to gender = conditioned into behaving according to certain gender roles*
- low internal validity
 - not a lab experiment - no control of EVs
- demand characteristics
 - may have worked out purpose of experiment & played along

DAVID REIMER - gender reassignment

- ▶ born healthy male baby along with identical twin
 - ▶ 8 months old when penis was removed in a circumcision that went wrong
 - ▶ parents were advised by a psychologist, Dr Money, to be raised as a girl
 - 22 months he had his testes removed
 - during puberty was given oestrogen
 - age 13 was suffering from depression
 - gender identity was not female - unhappy being raised as a girl
 - age 14 told about his gender reassignment - decided to revert to being male
- *challenges the theory as although Reimer was raised as a girl, he still did not identify as female after 13 years of nurture*
 - *shows nature (genes) play stronger role in gender development than nurture (upbringing) as unaware of being male*
- + natural experiment
 - high ecological validity
 - low internal validity - raised 22 months as male
 - critical stage in gender identity
 - could have influenced gender development
 - twin brother may have socialised him to become more male
 - low external validity
 - case study - not generalisable or replicable

- + overall supporting evidence stronger than challenging evidence
 - poor control of challenging evidence weakens contradiction of biosocial approach

REDUCTIONIST

- approach considers that biology plays a part in gender development
 - does not consider strength of the role of hormones & genes in gender development (Diamond et al)
- hard to untangle role that **genes & hormones**//**socialisation** play
 - sex of the child will undoubtedly influence how they are treated
 - no method to investigate which has **more influence**

biological influences on gender dysphoria: biosocial approach

- ▶ argues gender is **flexible**
 - focuses on the interaction between biological & social/cultural factors
 - **biology** = foundation on which **social factors** are built
 - how baby behaves affects how it is socialised & therefore eventual gender identity
- ▶ **hormonal imbalances**
 - may make babies **behave** more in line with **opposite sex**
 - initial biological foundation of gender dysphoria
- ▶ **sex & gender hormones**
 - hormones that trigger **development** of sex & gender may not work properly on **physiology** associated with sex - brain, gonads or genitals
 - **sex** (determined physically by **gonads & genitals**) could be male
 - **gender** (as determined by the **brain**) could be female
 - could be caused by additional hormones in mothers system (androgen insensitivity)

- ▶ **BSTc**
 - **hormonal imbalance** cause BSTc to develop in line with the **opposite gender** of biological sex
 - located in the **hypothalamus** & fully developed by 5 years
 - **influences sex differences** in behaviour & gender identity
 - BSTc is **larger in men**, or larger in women with gender dysphoria & vice versa
 - theory argues gender dysphoria in children with BSTc of opposite sex **depends on how socialised**
 - child's gender identity consistent with the way it is raised
- ▶ **culture** affects way child is socialised
 - therefore also the consequences of the initial hormonal differences
 - UK recognises gender dysphoria = sex realignment surgery logical outcome
 - > parent's awareness of this may alter the way the child is raised

NATURE/NURTURE

- ▶ acknowledges gender dysphoria is result of complex interaction of nature & nurture
- ▶ however, states key role in gender dysphoria is **nurture**
 - how a child is raised is = most important factor in gender identity
- ▶ raises questions
 - BSTc sized for opposite sex socialised as biological sex
 - biosocial approach argues gender dysphoria would not result - nurture overrides nature
 - may be nature (**hormonal differences** that influence the BSTc) are **enough** to cause gender dysphoria
 - biosocial approach is not convincing

ZHOU - transexual brains

- ▶ studied 6 male to female transexual's brains in postmortem
 - BSTc resembled the average female's
 - couldn't be wholly accounted for by hormones taken in adulthood
 - suggests BSTc responsible for gender identity & therefore gender dysphoria
- ▶ *supports theory to an extent*
 - *suggests such babies will behave as opposite biological sex = socialised as opposite sex = gender dysphoria*

- ▶ *however, shows gender may be purely biological*
 - *BSTc may biologically determine gender dysphoria alone - socialisation little role in development*
- + high scientific validity
 - lab experiment, replicable, objective & measurable results
- low external validity
 - very small & limited sample - only male to female transexuals

OTHER RESEARCH

- boys with gender dysphoria rated more attractive than control children by mothers
- more likely to describe sons as beautiful in infancy
- *supports theory - children socialised in a more feminine way - caused gender dysphoria*
- *however, helpful to know more about prenatal hormonal influences - judge whether nurture alone enough to cause gender dysphoria/or also needs biological foundation for it*
- incidence of gender dysphoria changed across culture & time
 - gender dysphoria more widely understood = sex realignment surgeries increasing
- *doesn't support theory - different rates of gender dysphoria do not preclude existence at a higher than diagnosed result*
- *indicates some societies have more freedom to express gender identity*

- quality & quantity of research weakens support for theory - difficult to study
 - longitudinal study of babies needed to consider interacting roles of upbringing & biology
 - impossible to carry out as can't predict gender dysphoria
- + more research can be carried out in future due to advance of brain imaging
 - unfair to completely dismiss theory currently

NATURE/NURTURE

- most convincing evidence = **Zhou** = purely **biological**
 - suggests biology is the determining factor in gender dysphoria,
 - nature may have more of a role in the development than explanation suggests
- how important **nurture** is remains **unclear & controversial**
 - gender dysphoria caused by parenting = blame can be placed on parents
 - unhelpful stance & suggests something wrong rather than something different with gender dysmorphia
- growing **awareness** & more **treatment - prospects** for people with gender dysphoria to live as gender they perceive themselves as = much **improved**
- more **research** needed to evaluate fully, but currently primarily biological in origin

cognitive approach to gender development: Kohlberg's gender consistency theory

- ▶ children acquire an **understanding** of the **concepts of gender** (male and female) in 3 stages, in **set order**
 - **gender identity** - 2-3yrs
 - recognises they are male/female but knowledge is still fragile
 - may not notice girls grow up into women & boys into men
 - **gender stability** - 3-7yrs
 - realise people retain their gender for a lifetime
 - still tend to rely on superficial signs to determine gender (e.g. hair length)
 - **gender consistency** - 7-12yrs
 - realises gender is permanent whatever happens to physical appearance (men with long hair still male)
 - come to value behaviours & attitudes associated with their gender
 - > identify with adults who possess these qualities
- ▶ theory argues that children are **active agents** in their own **gender role socialisation**
 - their thoughts about gender determines when & how they show gender role behaviour
- ▶ once children acquire **gender consistency**, they collect information about their gender role
 - imitate same sex **role models** follow gender appropriate activities
 - called **self socialisation** - does not depend on others

NATURE/NURTURE

- ▶ **nature:** all children will go through **stages in order** at the **set ages, innately**
- ▶ **nurture:** information children collect about gender through **self socialisation** varies according to **culture**
 - allows for different understandings of gender to exist in different cultures
- ▶ what theory attributes to **nature** may actually also be **influenced by nurture**
 - supporting evidence implies nurture is key area in the cognitive development of gender

SLABY & FREY - identity & consistency test

- ▶ observed & questioned children
 - showed picture of a girl & boy & asking "which one are you?" (measures gender identity)
 - "when you grow up, will you be a mummy or a daddy? (measures gender consistency)
 - children go through the 3 stages in order
 - 3 year olds understand none of the concepts
 - 4 year olds understood gender identity
 - 5 years old understood all 3 concepts
- ▶ *partially supports theory as the children seemed to follow the 3 stages in order*
- ▶ *however, ages of each stage different to the theory*
 - *suggests theory is correct but age at which each concept develops is different*
- + methodology appropriate for age group
 - simple questions & pointing at pictures good way of assessing what children think
 - low demand characteristics - high internal validity

MARTIN & LITTLE - gender stereotypes

- studied 3-5 year olds
 - children very basic understanding of gender
 - however, strong gender stereotypes about gender appropriate behaviour
 - concluded only basic gender understanding needed to affect the child's gender behaviour
- *weakens support for the theory:*
 - *although children behaved appropriately for gender & understood gender stereotypes, children may not need to know they are their own sex to behave appropriately for their gender*
 - > observation
 - + natural reaction - higher external validity
 - demand characteristics

CROSS CULTURAL STUDIES

- shown the 3 stages develop in order
- + high external validity
- cross culture sample means theory applies well to different groups of people despite nurture

- + overall, good research support for theory
 - cross culture - high external validity
 - good methodology - high internal validity
- however, theory is gender biased
 - Kohlberg's original research androcentric - females judged on male standard
 - **BAUER - role models & earlier gender awareness**
 - found boys more willing to imitate male role models from as early as 2 years
 - *suggests awareness of gender far earlier than theory suggests*
 - findings may be better explained by **GENDER SCHEMA THEORY**
 - ~ suggests children begin to take on gender appropriate behaviours as soon as aware of own gender (gender identity)
 - may also be explained by **BIOLOGICAL APPROACH**
 - ~ male hormones lead them to be more interested in masculine activities than feminine activities

cognitive approach to gender development: gender schema theory

▶ **schema**

- mental framework that helps people to organise and understand information
- allow us to predict what to do in certain situations
- ▶ theory argues **gender identity develops** through both **cognitive & social processes**
 - unlike Kohlberg, children don't need to know gender is permanent to develop gender schema
- ▶ child's gender schema develops around **2/3yrs**
 - as soon as the child **notices differences** between boys & girls and can **label** the 2 groups reliably
 - having developed schema, child then **looks for evidence** to **support** their **schema**
 - **sex related schemas**
 - a girl may begin identifying toys which are for "**in-group**" (doll - girl) or "**out-group**" (train - boy)
 - then move onto "**own-sex**" schema (doll - girl = doll for me)
 - > these schemas help children interpret & organise their experience
 - > schemas simplify world for us - similar to stereotypes
 - do not **categorise** information/make **generalisations** - not able to **manage our lives** effectively
 - children exposed to endless stream of new information & novel input
 - > processes necessary in order to make sense of the complex world around them
- ▶ **gender schema** that a child develops **appropriate** to child's **culture**
 - gender schemas vary from culture to culture

NATURE/NURTURE

- ▶ could be argued role of **environment** (nurture) shapes what goes into child's in/out-group/own sex **schemas**
 - dependant on the child's **culture & upbringing**
- ▶ however, could also be argued that the **need for schemas** is **innate** (nature)
 - children need to be able to **simplify & organise** information from complex world around them

MARTIN - gender stereotypes & toy preferences

- ▶ showed toys to children aged 4-5
- ▶ informed beforehand whether it was a girls/boys toy
 - label 'girl' or 'boy' given at the start consistently affected toy preference
 - girls did not play with boys toys & vice versa
 - *supports theory as demonstrates strong effect of gender schemas & stereotypes over behaviour*
 - *highlights children's need to label/categorise to be simplify subjects as complex as gender*

+ methodology appropriate for age group

- simple questions & pointing at pictures good way of assessing what children think
- low demand characteristics - high internal validity
- children's need to please adults
 - possible toy choice due to fear of punishment
 - lower internal validity - results not due to gender schemas, weakens theory

EISENBURG - sex-role & toy preferences

- ▶ asked 3-4yr old children what toy's others/they would like
 - used sex-role oriented thinking to justify answers
 - significantly less of this type of reasoning to justify own toy preferences
- ▶ after a session of free play asked again
 - did not justify toy choices by referring to gender
 - justified choices referring to toys themselves & what they could do
- ▶ *contradicts theory:*
 - *shows children may choose toys that appeal to them rather than choosing to fit in with their ideas of gender appropriateness of the toy/gender schemas*
- ▶ *in-group/out-group used, but not own-sex schemas*
- + methodology appropriate for age group
 - using toy choice to assess gender schemas
 - low demand characteristics - internal validity
- asked about toy 2x
 - children could guess intention of study
 - lowers internal validity

- + overall, methodology of research increases quality of research
 - lab studies - high control
 - appropriate way to assess children
- + theory offers good insight to why children cling to gender stereotypes
 - need to simplify/process new information
 - pay minimal attention to information that contradicts schemas/may distort current knowledge
 - exist despite best efforts of some parents
 - however, inconsistency of results weakens theory
 - low reliability & validity, both internally & externally
 - low control over certain issues (EVs) weakens support
 - child's need to please
 - results due to social values

SOCIAL SENSITIVITY

- ▶ theory **excuses stereotypes** of children for their 'innate need for schemas'
 - removes responsibility from parents & blame on children
- ▶ if stereotypes are not challenged, could stay in adulthood
 - may lead to discrimination

social influences on gender: parent's & school's influence on gender roles

▶ behavioural approach

- parents & schools influence learning of gender role behaviours through conditioning
 - operant conditioning - consequences of behaviour determine whether it will be repeated
 - gender appropriate behaviour - positively reinforced = repeated in future

▶ socialising agents

- exert influence on gender role behaviour of children
 - informal - parents, friends, siblings
 - formal - schools, institutions

PARENTS

HAGAN - risk-taking behaviour

- ▶ examined how parents influence sex differences in young children's risk taking behaviour
- ▶ 80 3-4 year old children climbed across a 5ft cat walk & 3ft high beam under parent's supervision
- ▶ both activities posed potential threat to safety without proper parental monitoring
 - fathers monitored daughters more than sons
 - mothers monitored sons & daughters similarly
 - other research also shows father's behaviour discriminates daughters more than mother's

- ▶ *shows difference in way parents treat children according to gender, which may influence behaviour & gender roles*
- + observation - high internal validity
 - good assessment of natural parent reactions to children's risk taking behaviour
- unnatural situation - demand characteristics
 - low external validity - can't generalise
- no follow up
 - does not show long term impact on child's gender as a result of being treated differently

FRIEDMAN - mother's attitudes/child's stereotypes

- ▶ 74 mother-child pairs read & discussed gender related story
 - content analysis of mother's talk carried out
 - mothers with gender-equal attitudes used more counter-stereotypical comments
 - mothers used more counter-stereotypical comments with daughters than sons
 - mothers gender attitudes predicted gender stereotyping in younger children (3-4) but not older children (6-7)
- ▶ *shows parent's attitudes to gender roles influences way child is brought up around subject of gender*

- ▶ *more counter-stereotypical views to daughters maybe due to increased likelihood of her experiencing discrimination due to gender*
- ▶ *shows social influences on gender no long term effect*
 - *mother's gender attitudes predicted child's gender stereotypes in younger but not older*
- + observation - high internal validity
 - measuring natural conversations between mother & child
 - studied how gender attitudes influenced children's stereotyping in later childhood
- no follow up
 - does not investigate long term effect

SCHOOLS

EVANS & DAVIES - school books

- ▶ looked at books published in 1997 america for children in 1st, 3rd & 5th grade
- ▶ carried out content analysis
 - roughly equivalent number of male/female characters (54% male 46% female)
 - however, characters represented differently:
 - male = more aggressive & competitive
 - female = more passive/emotionally expressive

- ▶ *shows although gender is represented roughly equally in books, gender roles of the characters are different*
- ▶ *not so much gender discrimination, but exaggerating gender stereotypes*
- content analysis
 - does not show effect books have on children's gender behaviour
 - risk of cherry picking/researcher bias

BIGLER - gender/colour groups

- field experiment
 - teachers asked to use gender to divide children into groups (e.g. boys & girls)
 - control classes divided into colour groups (e.g. red & green)
 - 4 weeks later - children in gender groups showed more gender stereotypical views compared to control group & own pre-test scores
- *shows subjecting children to gender divide influences cognitions about gender through stereotypes*
 - + high internal validity
 - field experiment - natural environment, low demand characteristics
 - no follow up
 - does not investigate long term effect

- + overall, increased internal validity - can draw significant conclusions about role of social influences
- however, more longitudinal research required to investigate further
 - Friedman - results imply no longer influences after 7+ years
- gender schemas could be altered by social influences
 - Bigler - influence caused by stereotypes of being in gender groups, affecting schemas more
- social learning theory - learnt certain behaviours/stereotypes from role models & repeated it
 - Evan's & Davies - influenced to replicate gender-stereotypical behaviour from role models in books

NATURE/NURTURE

- assessing importance of social influences refers to role of **nurture** in gender (of parents & schools)
- however, social influence very hard to test scientifically
 - **can't isolate** nature/nurture influence to see which has more of an effect
 - can't rule out significance of **biological sex** on gender
- **biosocial approach** may explain gender influences better
 - biology is foundation on which social factors are built
 - incorporates both factors to have an influence on gender development

social influences on gender: cultural influence on gender roles

- cross-cultural research indicates whether or not patterns of behaviour are **universal**
 - > **consistent** across cultures = biologically determined/**nature** biggest influence
 - > **different** across cultures = behaviour learnt/**nurture** biggest influence

MEAD - 3 tribes

- ▶ claimed traits we call masculine & feminine are completely unrelated to biological sex
- ▶ studied 3 New Guinea tribes:
 - the Arapesh
 - both sexes showed traditional feminine traits
 - described as gentle, loving & cooperative
 - boys & girls both reared to show these qualities - stereotypically feminine
 - the Mundugmor - ex cannibals
 - both sexes showed traditional masculine traits
 - described as fierce, self-centred & arrogant, continually quarrelled
 - both sexes detested pregnancy & child-rearing
 - the Tchambuli
 - reversed gender-roles to the west
 - females took care of trading & food gathering
 - > girls encouraged to take interest in tribal-economic affairs
 - males considered sentimental, emotional & incapable of making serious decisions
 - > spent most of day in groups gossiping & preening selves

- ▶ *suggests culture influences all aspects of gender role (which are socially constructed) - nurture larger influence*
- observer bias
 - over-emphasised role of nurture due to own beliefs - not objective
- cultural bias
 - imposed beliefs of own culture on way she interpreted other culture
- observation
 - no control over EVs - biological factors

WILLIAMS & BEST - gender stereotypes across cultures

- ▶ explored gender stereotypes in 30 different national cultures
 - men more dominant, aggressive & independent
 - women more nurturing, respectful & interested in bonding
 - suggests gender role stereotypes of females being more emotionally expressive than males very widespread

- ▶ *supports idea of universals in gender characteristics in different cultures - nature larger influence*
- + large & varied sample
 - high ecological & external validity - generalisable
- no control over EVs
 - differences could be due to biology

110 NON-INDUSTRIALISED SOCIETIES

- 75% more pressure on girls to be nurturing
- 55% considered responsibility more important in girls
- 32% showed obedience far more stressed in girls
- 79% more pressure on boys to achieve high
- 77% regarded self reliance more important in boys

- *suggests gender roles heavily influenced by nature - parental investment*
- *however, cultural differences show role of nurture*
 - *gender roles innate/universal but slight variation shows influence of culture - interaction of nature & nurture*
- + large & varied sample
 - high ecological/external validity - generalisable
- no findings 100%
 - can't be purely nature - must be EVs
 - might expect pressure to achieve greater in boys due to child rearing - only found in 79%

- + overall, high external validity of research helps to give insight on effect of culture on gender
- however, inconsistency of results reduces reliability
 - conflicting evidence weakens support for either nature or nurture having more influence
- observer/cultural bias
 - unfair to base judgements of other cultures from own experiences & culture
 - manipulating findings to suit own theories

NATURE/NURTURE

- research shows role of nature & nurture on gender roles
 - **Mead** - gender roles socially constructed as differences across cultures - **nurture**
 - **Williams & Best** - universal ideas of gender roles - innate reaction - **nature**
 - **Societies** - gender roles innate/universal but slight variation shows influence of culture - **both**
- however, does not explain **why** nature/nurture had **more effect** on each situation

BIOSOCIAL APPROACH

- this theory may help to explain influence of both nature & nurture in results
- focuses on the **interaction** between biological & social factors
 - **biology = foundation** on which social factors built
 - emphasises **social factors** as cause for **gender differences**
- gender is **flexible** so gender roles may **vary** across **time & culture**