AGGRESSION

social psychological explanations: social learning theory

- aggression is learnt by **observing & imitating** others
  - more likely imitated if we observe a **role model**
    - people we identify with (age, gender etc)
  - once learned, we choose wether or not to show behaviour
- learned directly through reinforcement
  - reward & punishment

- learned indirectly through **vicarious reinforcement**
  - seeing others rewarded or punished
  - consequences taken not of by the observer to form **mental representation**
    - whether behaviour is worth repeating
  - positive consequences = more likely repeated

NATURE/NURTURE

- argues aggression is **nurtured** behaviour
  - severity of aggression can be altered by changing **environment**
    - e.g. limiting aggressive behaviour shown positively on children's TV to reduce vicarious reinforcement
  - **reductionist**
    - discounts biological factors

BANDURA - bobo doll

- children divided into groups & matched according to existing aggression levels
- placed in a room with an adult & various toys
- saw adult either be aggressive or being non-aggressive to the doll
- given opportunity to play with bobo doll when adult leaves
  - those who saw the aggressive adult hit the bobo doll far more
  - *supports SLT as children who observed aggressive role model, imitated the aggressive behaviour*

+ lab experiment
  - controlled EVs - matched pairs design

– mundane realism
  - artificial setting & situation

– low external validity
  - lab experiment & child sample

BANDURA & WALTERS - bobo doll films

- children shown a film of adult being aggressive to the bobo doll
- 3 groups saw different endings to the film:
- role model rewarded/punished/no consequences
- given opportunity to play with bobo doll
  - children saw adult rewarded most aggressive
  - children saw adult punished least aggressive
- *supports SLT as children more likely to show aggressive behaviour if saw role model rewarded*

- *evidence for mental representation & vicarious reinforcement - considers effect of punishment*

+ lab experiment - controls EVs
+ distinctive actions used by role models
  - unusual to occur naturally, ensures imitation

– low ecological validity - unlikely situation
– no follow up
  - doesn't show long term effect
– play-fighting more logical explanation
– doesn't support theory

+ overall, evidence strengthens the theory as results are consistent
  - suggests children & adults can behave aggressively via observing others
- however evidence is artificial
  - lab experiment & situation
  - more research needed outside of the lab to offer better external validity
- low temporal validity
  - 1960s

PRACTICAL APPLICATIONS

- parents need to be aware of time spent playing on aggressive games/watching aggressive TV
- limits transferring idea of aggressive behaviours on others is acceptable

social psychological explanations: deindividuation

- loss of personal **identity & responsibility**
  - due to being in a crowd, darkness, wearing uniform, altered state
  - suggests blocking of self awareness, leading to loss of self control & aggression

- **Prentice-Dunn & Rogers**
  - deindividuation due to altered **self awareness**
    - public self awareness
      - > sense of being visible to others
      - > crowds = less visible = more anonymous = more likely to get away with aggression = aggression
    - private self awareness
      - > sense of self/thoughts/feelings
      - > crowds = attention focus outwards = unable to think for selves = impulsive/irrational behaviour = aggression

- **Zimbardo**
  - deindividuation due to **anonymity**
    - reduces fear of negative evaluations from others & feelings of guilt
  - behaviour usually rational & conforms to social standards
  - deindividuated behaviour based on primitive urges

NATURE/NURTURE

- argues aggression is **nurtured** behaviour
  - severity of aggression can be altered by changing **environment**
    - e.g. preventing situations where deindividuation in violent situations could occur
  - **reductionist**
    - discounts biological factors

ZIMBARDO - hooded electric shocks

- participants asked to deliver electric shocks to another woman as part of a 'learning experiment'
- 2 conditions:
  - bulky clothing & hoods which covered faces, never called by name, dimly lit room
  - regular clothes & large name tags, frequently called by name, brightly lit room
  - shocks delivered by hooded group 2x as severe
    - *supports anonymity theory as when they placed in 1st condition they lost identity & responsibility, lost self awareness & displayed more aggression*

> lab experiment

\+ compared hooded & non hooded

– low mundane realism

> deceived

\+ natural reaction - increases ecological validity

– ethical issues with deception

WATSON - warriors

- investigated 23 different war oriented cultures
  - warriors depersonalised themselves significantly more likely to kill or mutilate captured enemies
  - *supports theory as warriors who wore masks/face paint more likely to be aggressive to their enemies - depersonalised & lost sense of identity & responsibility*

\+ natural experiment
- no demand characteristics
- high ecological validity

– experimenter bias
- looking out for higher aggression

– cultural norms?
- tradition, not deindividuation

PRENTICE-DUNN - attention focus

- participants split into 2 conditions:
  - outward attention focus group
    - > instructed participants repeatedly to focus attention outward
    - > dimly lit rooms, loud rock music, verbal interaction encouraged & video games
    - > induced deindividuation
  - internal attention focus group
    - > told not to interact, performed individual tasks & played non-arousing games
    - ◦ <u>higher levels of aggression in outward attention focus group</u>
    - ◦ *supports self awareness theory as those placed in outward attention group (reduced private self awareness) & encouraged to feel anonymous (reduced public self awareness) more aggressive*
  - no quantitative measure of aggression level
    - cant be completely compared
  - > lab experiment
  - \+ controls for EVs
  - – demand characteristics/low external validity

+ overall, evidence strengthens theory as results are consistent
  - suggests deindividuation can cause aggression
- however lab-based evidence hard to generalise
  - limits support for theory
- ethical issues
  - need to change psychological state of participants to study by experimental manipulation
  - may engage in antisocial behaviour they would not normally be involved in

PRACTICAL APPLICATIONS

- offers psychological reason as to why aggression may occur in groups, such as the London riots
- could help police to have a better understanding of targeting & dealing with potential explosive situations

social psychological explanations: institutional aggression - the power of the situation & dehumanising labels

- **Zimbardo**
  - situation causes aggression, whilst dehumanising labels make someone more prone to being a victim
    - **the power of the situation**
      - > situation influences wether people are aggressive to others
      - > people who are usually mild mannered may find themselves being aggressive in certain situations
      - > institutional factors (e.g. lack of external constraints) increase willingness to cause harm
    - **dehumanising labels**
      - > individuals more likely to be aggressive to others when they label/dehumanise them
      - > dehumanised/derogatory label = victimised =target of aggression
      - > numbered in prison

DETERMINISM

- presumes aggression caused wholly by the **situation** - does not allow for **free will** of individual
- individual is a victim of environmental circumstances
  - may lessen individual's sense of **responsibility** for their own behaviour
  - could lead to an increase in aggression because **blame is removed**

ZIMBARDO - Stanford prison experiment

- volunteer sample of 22 male students
- half prisoners & half guards
  - all judged to be of good mental health/no antisocial behaviour before study began
- prisoners arrested & installed in mock prison, minimal guidance on how to behave
  - wore smocks & were referred to by numbers
  - study stopped after 6 days due to the extreme behaviours that occurred
    - guards
      - > verbally aggressive towards the prisoners
      - > began controlling their behaviour (e.g. sleep/ toilet) & subjecting to arbitrary commands
    - prisoners
      - > rejected with initial rebellion, then accepted role - became extremely passive
  - guards surprised by how they acted - attributed behaviour to demands of situation & roles given
  - *strongly supports theory as no constraints put on the guards behaviour who had no history of violence/antisocial behaviour - results were due to situation & not disposition*
  - *prisoners also dehumanised, testing theory of labelling causing victimisation*

+ lab study - cause & effect
  - no history of aggression, so situation only cause

> ethical issues

– psychological harm due to intense stress

+ experimental realism
  - participants felt it was real, so results have high validity

BANDURA - nice/animal students

- students told to work with another school on a group task
- either overheard assistant refer to the students from other school as 'nice' or 'animals'
- later asked to deliver electric shocks to the students
  - higher shocks delivered to those in the 'animal' condition
  - *supports theory, especially dehumanising labels, as group labeled as 'animals' (dehumanised) more targeted by aggressive behaviour (electric shocks)*

+ lab study
+ compared conditions
  - isolated situation/labels as cause for aggression
+ overheard assistant
  - increases validity as students not biased by experiment but by situation
  - experimental realism

+ research lab based & carefully controlled
  - increased reliability & validity
– serious ethical issues
  - however, created experimental realism
+ however, research adequately supports the theory

PRACTICAL APPLICATIONS

- useful theory as prisons can change environment to limit aggression caused by situation
  - e.g. regulating temperature, natural light & sense of space
- prisons can predict aggression
  - e.g. inmate has a difficult visit or interview with the police

social psychological explanations: institutional aggression - importation model

- institutional aggression caused by the **aggressive nature** of the people there
- aggression **imported** into the institution, from the **character & personality** of the people
- aggression not a product of the institution
- inmates have a **predisposition** for violence

SOCIALLY SENSITIVE

- has many **negative implication**s for prisoners & their families
  - labelling & imposing blame
  - could lead to a hands-off approach to the changing of prisons to reduce violence
    - it is the prisoners not the conditions they live in to blame
  - difficult for prisoners to get work outside of prison
    - people may label them as aggressive

POOLE & REGOLI

pre-institutional violence

- researched 4 different types of juvenile institutions
  - pre-institutional violence best predictor for inmate aggression
    - regardless of the specific features of the institution
  - *supports theory as aggressive nature was the cause, not institution itself*
    - *the aggression imported into institution*

IRWIN & CRESSEY

culture & characteristics

- inmate's behaviour due to cultural/personal characteristics brought in by prisoners
  - young & impoverished inmate backgrounds more likely to be aggressive
  - different ethnic backgrounds display varying degrees of aggression
    - may be due to different socio-economic backgrounds
  - *study supports theory as prisoners showed importation of aggression into institution (dependant on characteristics)*
  - *however not clear why inmates aggressive in the first place/what makes some more aggressive*

KELLER & WANG

maximum security

- prison violence occurs in prisons which hold the most troublesome inmates
  - maximum security inmates had higher levels of assault on staff by inmates
    - compared to those in lower risk facilities
  - *study supports theory as prisoners in high security more aggressive*
    - *previously more troublesome - characteristics cause aggression*
  - *however could be argued as situational cause*
    - *high security institutions have more intense environmental triggers for aggression*

> natural experiments

\+ high ecological validity

\+ low demand characteristics

– low control

- can't establish cause/effect
- other EVs involved

+ overall theory has reliability as research consistently supportive
- however, low control of research (not lab based) so could be other factors involved
- offers a limited view of institutional aggression
- does not suggest why aggressive in the first place

DETERMINIST

- suggests that we will import our aggressive values into institutions & have no control over showing aggression
  - fails to consider the role of free
    - we have a choice in how we behave
  - fails to take into consideration all individuals who will not act aggressively as a result of being in prison
    - good behaviour = earlier release
- lack of consideration of individual differences
  - theory fails to provide a good explanation into institutional aggression of all individuals
  - weakens external reliability

biological explanations: genetics - general link between genes & aggression

- **aggression is inherited**
  - aggressive people inherit genes that **predispose** them to being aggressive
- the **closer the relationship** to the aggressive person, the stronger the inherited tendency
  - **more forbears** (blood relatives before) aggressive = the more likely inherited genes

DETERMINIST

- link between genetics & aggression is biologically determined
  - inherited aggressive genes = predisposition = aggressive behaviour **unconscious choice**
- issues with **responsibility & blame**
  - any wrong or inappropriate behaviour can not be deemed as their fault
  - victim of their inheritance

McGUFFIN & GOTTESMAN - concordance

- studied concordance rates for aggressive & antisocial behaviour in MZ/DZ twins
  - 87% concordance rate MZ
  - 72% concordance rate DZ
  - *supports theory as higher level of aggression in MZ , who share 100% genes compared to 50% genes*
  - *however there is not 100% concordance rate, so must be other factors involved*

> natural experiment

\+ no demand characteristics, high ecological validity

\- can't assume cause & effect

\- EVs - MZ twins treated more similarly

HUTCHINGS & MEDNICK - adoptions

- reviewed over 14,000 adoptions in denmark
  - positive correlation between convictions for violent offences amongst biological fathers & adopted sons
  - *supports increased aggression in fathers increased aggression in sons*
    - *shows genetic/biological cause as aggressive upbringing/environmental factors from biological fathers controlled for*
  - *however, aggression could have other causes*
    - *process of adoption itself stressful*

> natural experiment

\+ no demand characteristics, high ecological validity

\- correlation - can't assume cause & effect

\- EVs

- MZ twins treated more similarly
- stress of adoption causes aggression

+ overall, research consistency supports theory
- however, possible environmental influences weaken reliability of theory

REDUCTIONIST

- reduces complex behaviour such as aggression down to just genes
- not certain behaviour really can be caused 100% by a gene - environmental factors involved
- genes may give predisposition but does not always cause behaviour
  - interaction of biological & environmental influences - stress diathesis approach

biological explanations: genetics - role of a specific gene defect

- **warrior gene** linked to brain chemistry & increased aggression
  - genetic mutation
  - causes a **deficiency** in monoamine oxidase A (**MAO-A**)
    - **enzyme** that causes the breakdown of excess monoamine neurotransmitters in the brain
    - **noradrenaline** & **dopamine**
  - found on the **X chromosome**
    - why gene is more prevalent in men
    - women protected from the faulty gene by their other X chromosome
  - causes **imbalance** in amount of some **neurotransmitters** in the brain
    - not enough MAO-A released to break them down
    - imbalance predisposes the individual to become aggressive when under stress (e.g. angry, fearful)

DETERMINIST

- argues carriers of this gene will be aggressive & when they are it is not their **responsibility/fault**
- **not sole cause** of aggression
  - people with the gene don't always display this aggression (buddhist monks)
  - aggression also displayed by those not carrying the gene
  - suggests **free will** over behaviour

DUTCH FAMILY - warrior gene

- 4 generations of males in a dutch family - inherited MAO-A gene defect
  - showed aggressive & violent behaviour (e.g. arson & attempted rape)
  - seemed unable to regulate impulsive aggression
  - particularly marked when provoked

BRUNNER - Dutch family test

- tested urine in the men with gene defect
  - imbalanced levels of chemicals that result from neurotransmitters
  - indicates MAO-A levels deficient as they did not released enough to break down neurotransmitters

- *supports genetic explanation as the men with the defect displayed very aggressive/violent behaviour (arson & attempted rape)*
- *urine indicated imbalanced levels of the neurotransmitters, showing MAO-A deficiency*

> natural experiment

\+ high ecological validity

– can't control EVs
  - violence may be due to environment (e.g. upbringing)

– case study
  - can't replicate - low validity
  - can't generalise - low external/population validity

VISHNEVETSKAYA - Tg8 mice

- studied Tg8 mice that had a defected MAO-A gene
- compared to a control group of mice who had normal gene
  - Tg8 mice showed increased aggression towards intruder mice
    - increased territorial, predatory & isolation induced aggression
  - however did not show increase in all types of aggression
    - e.g. aggression to anaesthetised/juvenile/mice that weren't threatening
- *lends partial support to theory as the mice who had a defect seemed to exhibit certain types of aggression (e.g. territorial, predatory & isolation) but not to mice that offered no threat to them*
- *shows aggression is interaction of biological & environmental factors - aggression only triggered by certain conditions*

\+ lab study
- scientific validity - objective measures/ equipment
- high controlled - shows cause & effect

– animal study
- can't generalise to humans
- ethical issues

\+ overall research is consistently supportive about warrior gene's role in provoked aggression

– however, issues in the research prevent results being completely supportive or generalisable

– limitations to the warrior gene explanation
- not all individuals with the gene will be aggressive
- did not cause aggression in certain situations - suggests degree of free will/environmental factors
- no direct cause & effect link, only an association

SOCIALLY SENSITIVE

- if believed, there is future potential to possibly **eliminate gene** from society by preventing women carrying this gene from having children in order to reduce aggression/violence
- socially sensitive to these women involved & to men who carry the gene
- has an impact on the usefulness of this explanation of aggression

biological explanations: neural mechanisms in aggression

- refers to role of **neurotransmitters**
  - **low** levels of serotonin in the brain linked with impulsive **aggression**
  - **normal** levels of serotonin have a **calm**, inhibitory effect
  - low levels mean = inhibitory effect gone
    - people will be less able to control impulsive & aggressive tendencies
- **serotonin** works in the frontal areas of the brain to **inhibit** the firing of the **amygdala**
- the **amygdala** controls fear, anger & emotional responses
  - less serotonin in prefrontal cortex = less inhibition of amygdala = not under control
- amygdala stimulated by **potential threats** = becomes more **active** = drives person to act on **impulse**
- individuals have different levels of serotonin
  - varies day to day/hour to hour
  - some have low serotonin all the time
    - theory states these individuals **predisposed** to aggression

REDUCTIONIST

- attempts to explain aggression through levels of serotonin alone
  - can be positive - considering smaller parts means they can be **scientifically tested**
- however, fails to account for **other reasons** for aggressive behaviour
  - not all aggression due to low serotonin
  - can't explain why aggressive in the first place
    - e.g. threatened, upbringing, self defence etc
    - does not address the bigger issue
  - issues with responsibility & blame

CROCKETT - tryptophan drink

- repeated measures experiment on 20 participants
- participants fasted & given a protein drink in morning before study
  - one drink contained tryptophan (body needs to make serotonin)
  - other drink did not contain it
- participants played the ultimatum game - player poses way to split sum of money with partner
  - drink that not containing tryptophan (serotonin low) increased aggression on unfair offers
- *supports theory as lower levels of serotonin (due to the absence of tryptophan) more likely to act aggressive*

\+ lab study
- high control - replicable, standardised procedure
- repeated measures - removes individual differences

– small sample
- low external validity, can't generalise

DAVIDSON - violent criminals

- violent criminals had markedly lower levels of serotonin to non-violent criminals
- *supports theory as low levels of serotonin were linked to criminals with higher rates of violent acts*

\+ natural experiment
- high ecological validity

– specific to criminals
- low external validity, can't generalise

+ overall, research shows consistent support for theory
- however, low external validity weakens support - could be other factors involved
  - EVs such as environment not taken into account
  - low serotonin could be trigger not cause

PRACTICAL APPLICATIONS

- simplifying aggression to biochemicals means it can be **treated biologically**
- use of medication which can re-balance chemicals & therefore aggressive impulses
  - shows that the theory is quite convincing
- **SSRIs** beneficial in controlling an individual's impulsive urges
  - prevent re-uptake of serotonin & helps levels of aggression in every day life

biological explanations: hormonal mechanisms in aggression

- testosterone is a **hormone**
  - men 8x higher level of testosterone as women

high testosterone	**high testosterone + low serotonin**	**mismatch effect**
◦ early theories suggest high levels causes aggression ◦ more theories link high testosterone to need for dominance – e.g. businessmen/athletes higher levels testosterone but not violent, just want to dominate	◦ high testosterone makes individual seek dominance ◦ if frustrated due to dominance: – low levels of serotonin in the prefrontal cortex – impulsive behaviour caused by amygdala not under control – results in aggression	◦ also reflects view that testosterone links to dominance – higher testosterone = higher status/dominance you seek ◦ testosterone important when there is a mismatch between the level of testosterone & status – mismatch in levels (e.g. high status, low testosterone) results in aggression

SOCIALLY SENSITIVE

- **gender biased**
  - women have naturally lower testosterone
  - unfair to presume women in high status are going to be aggressive
- **employers** may be less willing to employ women for high positions
  - theory creates stigma that women will be aggressive in high status jobs

KREUZ & ROSE - prisoner testosterone

- studied testosterone levels in a group of 21 young adult male prisoners
  - did not relate to whether they fought with others in prison
  - did relate to nature of crimes committed
    - prisoners of violent crimes (e.g. assault & armed robbery) statistically higher levels of testosterone than non-violent crime prisoners

- *supports high testosterone theory as the prisoners who had high levels of testosterone more violent*
- *however, does not all aggression as didn't relate to whether they fought in prison*
  - *must be other (environmental) triggers*

– very small, androcentric limited sample
  - can't generalise, low population/external validity

JOSEPHS ET AL - job status change

- men & women with high testosterone levels reacted negatively after loss of high status
  - they became stressed, confused, anxious
- low testosterone levels & put into high status showed the same pattern of upset

- *supports mismatch theory as mismatched status & testosterone levels showed pattern of upset behaviour which could lead to aggression*

+ higher population validity
  - easier to generalise

– ethical issues
  - participants showed high degree of stress & anxiety
  - acted aggressive when abnormal for them
  - decreased emotional wellbeing

+ overall partial support for theories as link between testosterone & aggression is shown
- however, research support isn't 100% reliable due to generalisation issues

REDUCTIONIST

- argues aggression purely neurochemical - **discounts environment**
- not clear whether high testosterone **cause or effect** of aggression
- likely that high testosterone more sensitive to reacting to environmental stress
  - interaction of biology & environment
  - **stress-diathesis** approach

evolutionary explanations: jealousy & infidelity

- aggression as an **innate response** to process of **natural selection**
  - male ancestors aggressive:
    - to compete and **eliminate competition** to ensure **reproductive success**
    - to **protect offspring** and partner
    - to **attract females** as they like strong and powerful men to ensure survival
- role of jealously and infidelity

- **infidelity**
  - emotional infidelity = emotional involvement with another person - women fear this
    - they do not want partner to invest resources in another woman
    - restricts chances of survival for her offspring
  - sexual infidelity = sexual involvement with another person - men fear this
    - waste of resources, genes not passed on
    - partner carrying another mans baby means investing resources onto offspring not his

- **sexual jealousy**
  - state of fear caused by threat to someone's status as an exclusive sexual partner
  - adaptive response leading to a number of mate retentive behaviours
    - retaining a mate is important to males
    - without faithful mate to bear/raise his children, chance genes passed on reduced

DETERMINIST

- fails to consider the role of free & individual choices over our behaviours
- incorrectly assumes all individuals who encounter jealousy/infidelity will become aggressive
  - not accurate explanation for aggressive behaviour in all individuals
  - lacks external validity

BUSS - cross cultural jealousy/infidelity

- looked at 37 cultures
  - males consistently valued chastity & faithfulness
  - women valued faithfulness more
  - males found sexual infidelity more distressing
  - women found emotional infidelity more distressing
- *supports theory as*
- *men value chastity to ensure that the offspring was theirs & not someone else's*
  - *couldn't be sure of this if mate sleeping with others*
    - *women value emotional faithfulness as they want their mate to have an emotional attachment to them*
      - > *make sure they stay & provide care for them & their offspring*

+ high external validity, generalisable
  - large, varied sample across 37 cultures
+ cross cultural similarities
  - suggests innate response rather than learned

MILLER - domestic abuse victims

- studied 44 female victims of domestic violence from their male partner
  - 55% stated jealousy as the reason for aggression
  - 25% stated own fidelity as the reason for aggression
  - some reported husbands disliked them going out with friends
  - some didn't let wives go shopping without them
- *supports theory as 80% of the women stated jealousy or infidelity as the reason for aggression*
- *males showed mate retentive behaviour proving there was sexual jealousy involved*
- *however, not 100% of aggression due to jealousy or infidelity, showing other factors must be involved*

– small & oestrocentric sample
  - low external/population validity - can't generalise

– investigator bias
  - looking out for jealousy/infidelity as cause
  - did not look at other factors e.g. environment

+ overall evidence supports theory that aggression is caused by jealousy/infidelity to good extent

– however, research does not look at EVs
  - more likely to be interaction of factors (stress diathesis approach)

– not all aggression caused by jealousy/infidelity

– hard to test evolutionary theory empirically
  - can't isolate nature/nurture factors
  - can't compare to aggression 1000s of years ago

REDUCTIONIST

- suggests aggressive behaviour only result of disposed innate reactions to natural selection
  - ignores impact of biological factors on aggressive behaviour (e.g. genes)
  - likely combination of both situational factors and dispositional factors
- lack of consideration to this, theory oversimplifies complex human behaviour
  - internal validity of the theory is weakened

PRACTICAL APPLICATIONS

- explanation can help the women who might be in danger of domestic abuse
- spot mate retention strategies so they can act before violence or aggression might occur

evolutionary explanations: group display - war

- war is the formation of groups to attack others within the same species
- joining group & taking part in war **improves survival** chance compared to acting alone
  - groups more powerful & afford more protection
    - war is adaptive
- success in war establishes:
  - **dominance** in status
  - better access to **resources**
  - elimination of reproductive rivals
    - ensures genes being passed on/**reproductive success**
- **mass rape** used as a weapon of war & can be accounted for by evolutionary approach
  - threat of rape causes people to flee their territory
  - rape may impregnate victim, continuing rapists genes
- **winners most aggressive**
  - aggressive genes passed on - leads to a species with disposition for aggression

EVOLUTIONARY APPROACH

- does not explain some aspects of war
  - **torture**
    - according to theory, important to kill completion to gain dominance, rescources & women
    - torture has no evolutionary advantage
  - **mass rape**
    - not strong enough evidence for theory
    - doesn't explain why some women are killed afterwards - no offspring
  - **female soldiers**
    - doesn't explain how there are more and more females joining the army
    - according to approach, no evolutionary advantage for females

CHAGNON - Yanomamo tribe

- studied Yanomamo people of the Amazon
  - constant fighting concerning access to women & raising status of one group over the other
  - successful warriors had more wives & children

- *supports theory as successful warriors showed aggression through group display to gain more wives/children /status*
- *makes evolutionary sense as increased status ensured more survival & reproductive success*

BOSNIAN WAR - systematic rape

- 50,000 women & girls raped by Serbians
  - to terrorise women into fleeing
  - to ensure children had Serbian blood

- *supports theory as mass rape carried out to gain resources & reproductive success*

EVOLUTION OF WAR

- occurs in many modern & pre-industrialised societies
- occurs in intelligent social species (e.g. chimpanzees & dolphins)

- *supports theory as shows group displays:*
  - *have evolutionary advantage to a species as they still happen today*
  - *occur over many species, evolving over time*

+ natural experiments
  - high ecological validity

– observational study
  - possible bias - researchers looking for behaviour
  - misinterpretation of cultural norms
  - low control over EVs

– not objective evidence
  - no quantitative measures or experimental method
  - reduces validity of theory as no scientific support

+ overall, studies do support theory to an extent

– however, lack of validity & possible researcher bias weakens theory

SOCIALLY SENSITIVE

- seems to **excuse violence** such as mass rape
  - states rape is just an evolutionary advantage & innate response to war
  - removes **responsibility & blame** from rapists
- ignores idea of **free will**
  - majority of humans do not want to take part in either rape or war

evolutionary explanations: group display - sport events

- in modern society, group display in terms of **war replaced by sporting events**
  - sport is **ritualised form** of aggression
  - all **benefits** of aggression available to competitors, but **reduced risk** of harm/death
- group display present in form of game itself
  - being part of a team or supporters
- **winning** team seen as holding **high status** & make members more **desirable as mates**
  - **athleticism & strength** required
    - competitor is advertising skill as potential provider, similar to hunting
  - victory also brings high status to supporters
- argues **hooliganism** is human equivalent to **ceremonial conflict** that occurs in animals
  - hooligans exclusively males
    - involved in trials of strength over territory
    - restrained by desire to minimise harm & death
  - **power & status** gained with **survival** intact

EVOLUTIONARY APPROACH

- cause of group display in sport due to evolutionary approach questionable
  - impossible to test empirically - can't isolate innate responses from environment
  - not convincing - being in a winning group of supporters doesn't improve reproductive success

CIALDINI - winning/losing pronouns

- studied supporters of university football team after match
  - winning team supporters = "we won" & wore clothes identifying with team
  - losing team supporters = "they lost"
- *study supports theory as winning team supporters associated with winning team to gain status & power*

MARSH - football violence

- observed football fans
  - appear very violent, but don't become physical
- *supports theory as shows group display is adaptive form of aggression - gain of power/status, but no physical danger*

\+ high external validity
- natural experiments/observational studies
- ecological validity
- easier to generalise due to natural behaviour

– natural experiments/observation
- can't control EVs
  - may be other factors involved
- non experimental
  - can't prove precise cause of group display

+ overall, theory supported to an extent due to high external reliability
- however, low validity as a test of evolutionary explanations for group display
    - non-experimental
    - can't determine cause/effect

SOCIAL LEARNING THEORY

- may be another explanation of group display in sport
    - group display learnt from role models
        - encouraged through vicarious reinforcement
        - supporting winning team = higher status = positive reward = repeated
- therefore evolutionary theory not completely convincing as sole explanation