

Oxford Revise | AQA A Level Psychology | Answers

Chapter 10

All exemplar answers given would achieve full marks or the top level.

1. Marks for this question: AO1 = 1

The unease an individual feels due to a mismatch between their biological sex and gender identity.

2. Marks for this question: AO2 = 6

This question is level-marked:

Level	Marks	Description
3	5–6	<ul style="list-style-type: none"> Knowledge of Kohlberg's theory is clear and generally well detailed. Application is mostly clear and effective. The answer is generally coherent with appropriate use of specialist terminology.
2	3–4	<ul style="list-style-type: none"> Knowledge of Kohlberg's theory is evident. There is some effective application. The answer lacks clarity in places. Specialist terminology is used appropriately on occasions.
1	1–2	<ul style="list-style-type: none"> Knowledge of Kohlberg's theory is limited. Application is either absent or inappropriate. The answer as a whole lacks clarity and has inaccuracies. Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

Possible AO2 application:

- Lily is in the gender identity stage of gender development, which happens at about the age of 3. Lily can identify herself as a girl but is unaware that her sex is permanent, which explains her comment that she wants to be a daddy when she grows up.
- Phoebe is in the gender stability stage of gender development, which happens about the age of 4. This is why she knows that gender is usually consistent over time and explains that now she's 5 she talks about being a mummy when she's grown up.
- Phoebe has not reached the gender constancy stage of gender development, which happens around the age of 6. This explains why she thinks her parent's friend is a man because 'he' has a stereotypically male job (builder) and short hair.
- Evie is in the gender constancy stage of gender development, which happens about the age of 6. Her understanding of gender has developed to understand that gender is consistent over time and across

situations, which is why she understands that Charlotte is a woman despite doing a stereotypically male job and having short hair.

Credit other relevant applications.

3. Marks for this question: AO1 = 4

This question is level-marked:

Level	Marks	Description
2	3–4	<ul style="list-style-type: none"> Knowledge of the role of testosterone in biological sex is clear and mostly accurate. The answer is generally coherent with effective use of specialist terminology.
1	1–2	<ul style="list-style-type: none"> Knowledge of the role of testosterone in biological sex is briefly stated with little elaboration. The answer may include inaccuracies and be poorly organised. Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

Possible AO2 application:

- Testosterone develops external genitalia in prenatal males.
- Testosterone affects brain development prenatally and later in childhood.
- Males have a surge of testosterone during puberty, causing secondary sexual characteristics, such as facial hair.

Credit other relevant material.

4. Marks for this question: AO3 = 3

3 marks for a clear, coherent strength or limitation of gender schema theory, using appropriate terminology.

2 marks for a strength or limitation of gender schema theory that lacks some clarity or detail.

1 mark for a brief or muddled strength or limitation of gender schema theory.

Possible AO3 evaluation:

- Gender schema theory's age-related predictions are questioned as children were found to use gender labels from as early as 19 months.
- Children under 6 were more likely to remember gender-consistent photographs, and many misremembered the gender-inconsistent photographs by recalling the person as the opposite sex (gender schemas distort memory processing).
- Children under 4 display strong gender stereotypes, which is consistent with gender schema theory and contradictory of Kohlberg's theory.
- Evidence of children distorting counter-stereotypes in their memory suggests their gender schemas are resilient to change because they don't recall counter-stereotyped information. Efforts to reduce gender

stereotypes should focus on providing children with direct experiences of people who do not fit stereotypes.

- The assumption of gender schema theory is that if a gender schema is changed, then gendered stereotypical behaviour will change. However, research demonstrates that contradictory schemas and behaviours are common. For example, many married heterosexual couples believe in equal division of labour within the home, but rarely carry this out in practice. This challenges gender schema theory because schemas don't necessarily impact on behaviour.
- Critics argue the role of schemas in determining gendered behaviour are exaggerated and overlook the role of social factors such as parental rewards and punishments. E.g. if a boy is praised for bravery by holding in his tears when in physical or psychological pain, he is likely to repeat that behaviour in the future.

Credit any valid strength or limitation.

5. Marks for this question: AO1 = 4

This question is level-marked:

Level	Marks	Description
2	3–4	<ul style="list-style-type: none"> • Knowledge of diversity in sex development is accurate and detailed. Androgen insensitivity syndrome is included in the answer. • The answer is clear and coherent. • Specialist terminology is used effectively.
1	1–2	<ul style="list-style-type: none"> • Knowledge of diversity in sex development is briefly stated with little elaboration. Androgen insensitivity syndrome may be missing or incorrectly described. • The answer may include inaccuracies and be poorly organised. • Specialist terminology is either absent or inappropriately used. <p>OR only physical OR psychological characteristics are outlined at Level 2.</p>
	0	No relevant content.

Possible AO1 content:

- Diversity in sex development is when a developing foetus does not have XX or XY chromosomes.
- Examples of different chromosomes such as XO (Turner's syndrome) and XXY (Klinefelter's syndrome).
- Chromosomal differences influence physical and psychological characteristics. (May give brief examples, e.g. XO females have a vagina and uterus, but ovaries do not develop, they often have a higher-than-average reading ability, but poorer spatial ability. XXY males have a penis but less facial and body hair and underdeveloped genitals. They often have problems with language development and an inability to cope with stress.)
- Hormones also play a role in diversity in the development of biological sex.
- Androgen insensitivity syndrome (AIS) refers to XY males who do not respond to the hormone testosterone, prenatally.

- Individuals with complete AIS do not develop male genitalia and appear biologically female at birth and have a short vagina.
- Their gonads do not descend into testes or develop into ovaries.
- Some secondary sex characteristics develop at puberty such as breasts, but they don't menstruate (no uterus or ovaries).

Credit other relevant material. Not all of the above information needs to be included for full marks, but answers must include information about AIS.

6. Marks for this question: AO1 = 2

2 marks for a clear, coherent explanation of the term 'gender fluid' as a gender identity.

1 mark for a limited or brief explanation of the term 'gender fluid' as a gender identity.

Possible AO1 content:

- Gender fluid identity falls under the non-binary classification, but there is no standard definition.
- A person's gender may be between male and female, or outside of both, and they may not want a gender identity.
- Gender fluidity is unfixed, dynamic, and expressed in a personal way, which may include through clothing, makeup, and pronouns, etc.
- Gender fluid gender expression and/or identity may change regularly or over time.

Credit other relevant material.

7. Marks for this question: AO3 = 6

This question is level-marked:

Level	Marks	Description
3	5–6	<ul style="list-style-type: none"> • Evaluation of the influence of culture and/or media on gender roles is thorough and effective. • The answer is clear, coherent, and focused. • Specialist terminology is used effectively.
2	3–4	<ul style="list-style-type: none"> • Evaluation of the influence of culture and/or media on gender roles is evident but there are occasional inaccuracies/omissions. • The answer lacks clarity in places. • Specialist terminology is used appropriately on occasions.
1	1–2	<ul style="list-style-type: none"> • Evaluation of the influence of culture and/or media on gender roles is limited. • The answer lacks clarity and organisation. • Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

Possible AO3 evaluation for culture:

- Margaret Mead's study of tribes in Papua New Guinea provided evidence of cultural differences in gender roles. Men and women in one tribe were gentle and cooperative, in another they were aggressive and striving for power, and in a third the women were dominant and men passive.
- Mead was criticised for investigator bias as she had preconceived ideas of what to expect. Freeman argued that she was deliberately misled by indigenous people, which she may have realised if she lived there longer. Mead subsequently 'softened' her conclusion about the influence of culture on gender and acknowledged significant biological influences.
- Cross-cultural research is often undertaken by Western researchers. Critics argue that theories and research tools created in Western society may be meaningless when investigating other cultures. To overcome the problem, research teams should generally include at least one member of the local population, which Buss did in his investigation of sexual attraction.

Possible AO3 evaluation for media:

- Evidence for media influences on gender: a longitudinal study investigated views on gender stereotypes before and after a Canadian town gained access to TV in the 1960s. Before, children had fewer sex-typed views and less gender-stereotypical behaviour and after, both measures had increased.
- A longitudinal study of children aged 6–12 found that those who watched more than 25 hours of TV a week held more sex-stereotyped perceptions than those who watched less than 10 hours.
- Some studies have found that media portraying counter-stereotypes can be influential in changing gender expectations. However, gender schema theory points out that children often misremember counter-stereotypes, which limits their effect. One study found that exposure to counter-stereotypes reinforced gender stereotypes in boys.

Credit other relevant material.

8. Marks for this question: AO1 = 4

This question is level-marked:

Level	Marks	Description
2	3–4	<ul style="list-style-type: none"> • Knowledge of how gender has been measured using the Bem Sex Role Inventory is clear and accurate. • The answer is mostly coherent with effective use of specialist terminology.
1	1–2	<ul style="list-style-type: none"> • Knowledge of how gender has been measured using the Bem Sex Role Inventory is briefly stated with little elaboration. • The answer may include inaccuracies and be poorly organised. • Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

Possible AO1 content:

- The Bem Sex Role Inventory was devised by asking male and female undergraduates to identify desirable personality traits for men and women (e.g. 'assertive' for men, and 'loyal' for women).

- The list was made into a questionnaire containing 20 masculine, 20 feminine, and 20 neutral traits.
- Respondents rate themselves between 1 (not true) and 7 (always true) on each item.
- Respondents who have high scores for both masculine and feminine traits are classified as androgynous.
- Gender was classified according to their answers (not their biological sex) in the following way: high masculine, low feminine score = masculine; high feminine, low masculine score = feminine; high masculine, high feminine score = androgynous; low feminine, low masculine score = undifferentiated.

Credit other relevant material.

9. Marks for this question: AO1 = 3, AO3 = 5

This question is level-marked:

Level	Marks	Description
4	7–8	<ul style="list-style-type: none"> • Knowledge of the biological explanation for gender incongruence is accurate with some detail. • Discussion is thorough and effective. • Minor detail and/or expansion of argument is sometimes lacking. • The answer is clear, coherent, and focused. • Specialist terminology is used effectively.
3	5–6	<ul style="list-style-type: none"> • Knowledge of the biological explanation for gender incongruence is evident but there are occasional inaccuracies or omissions. • Discussion is mostly effective. • The answer is mostly clear and organised but occasionally lacks focus. • Specialist terminology is used appropriately.
2	3–4	<ul style="list-style-type: none"> • Limited knowledge of the biological explanation for gender incongruence is present. • Focus is mainly on description. Any discussion is of limited effectiveness. • The answer lacks clarity, accuracy, and organisation in places. • Specialist terminology is used inappropriately on occasions.
1	1–2	<ul style="list-style-type: none"> • Knowledge of the biological explanation for gender incongruence is very limited. • Discussion is limited, poorly focused or absent. • The answer as a whole lacks clarity, has many inaccuracies, and is poorly organised. • Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

Possible AO1 content:

- ‘Transgender’ gene: a study of the DNA of 112 male-to-female transgender individuals found they were more likely to have a longer version of the androgen receptor gene than controls. This abnormality

reduces the action of the male sex hormone testosterone, which may influence prenatal gender development by under-masculinising the brain.

- Brain-sex theory suggests that the structures of transsexuals' brains do not match their genetic sex.
- An area of the brain called the 'bed nucleus of the stria terminalis' (BSTc) is, on average, twice as large in men than women and contains twice the number of neurons. Two Dutch studies of transsexual individuals found the number of neurons in the BSTc corresponded with their gender identity and not their biological sex.
- Genetic factors: MZ twins who share 100% DNA are more likely to both experience gender incongruence, compared to dizygotic twins who share 50% of their DNA. A study found concordance rates of 39% for MZs and 0% for DZs, which suggests that genetic factors play a role in its development.

Possible AO3 evaluation:

- A limitation of brain-sex theory is that differences in the BSTc don't develop until adulthood, but most transgender individuals report gender incongruence from early childhood.
- Researchers found that hormone therapy influenced the size of the BSTc, which could explain the findings of the two Dutch studies.
- A study of female-to-male transgender individuals before hormone therapy did find evidence supporting brain-sex theory, but inconsistent evidence suggests further research should be conducted to test validity.
- Not only do twin studies for gender incongruence tend not to have very high concordance rates for MZs (39%), but they assume equal environments for MZ and DZ twins when evidence shows MZs are treated more similarly. This suggests higher concordance rates could be for environmental rather than genetic reasons.
- Sample sizes for twin studies are extremely small due to the rarity of gender incongruence, which makes generalisations difficult.

Credit discussion of comparisons between the biological explanation with alternative explanations for gender incongruence, such as psychoanalytic theory or cognitive theory.

Credit other relevant material.

10. Marks for this question: AO1 = 3, AO2 = 2, AO3 = 3

This question is level-marked:

Level	Marks	Description
4	7–8	<ul style="list-style-type: none"> • Knowledge of the social learning theory of gender development with some detail. • Application to the topic is effective. • Discussion is thorough and effective. • Minor detail and/or expansion of argument is sometimes lacking. • The answer is clear, coherent, and focused. • Specialist terminology is used effectively.

3	5–6	<ul style="list-style-type: none"> Knowledge of the social learning theory of gender development is evident but there are occasional inaccuracies/omissions. Application to the topic and/or discussion is mostly effective. The answer is mostly clear and organised but occasionally lacks focus. Specialist terminology is used appropriately.
2	3–4	<ul style="list-style-type: none"> Limited knowledge of social learning theory of gender development is present. Focus is mainly on description. Any application/discussion is of limited effectiveness. The answer lacks clarity, accuracy, and organisation in places. Specialist terminology is used inappropriately on occasions.
1	1–2	<ul style="list-style-type: none"> Knowledge of social learning theory of gender development is very limited. Application/discussion is limited, poorly focused or absent. The answer as a whole lacks clarity, has many inaccuracies, and is poorly organised. Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

Possible AO1 content:

- Social learning theory (SLT) claims that all behaviour, including gender development, is learned through observation and imitation of significant role models.
- Reinforcements and cognitive factors also impact development.
- Direct reinforcement is when a child is rewarded for gender-appropriate behaviour or punished for gender-inappropriate behaviour. It encourages or dissuades repetition of the behaviour.
- Indirect/vicarious reinforcement is when a child sees someone else rewarded or punished for gender-appropriate or inappropriate behaviours. By observing the consequences of gender behaviours, children learn what are considered gender-appropriate behaviours in their world.
- A child imitates behaviour of significant role models such as parents, siblings, peers, teachers, or celebrities. These people model gender behaviours, which the child is more likely to imitate if they identify with them. Children identify with people they admire and perceive to be like them, especially if they are the same sex.
- Mediational processes (attention, retention, reproduction, and motivation) affect the likelihood of behaviour being imitated.

Possible AO2 application:

- Ismail learned through vicarious reinforcement that 'boys don't cry' when he saw his friend Herman punished (scolded) for crying when he hurt his knee falling over.
- When Ismail hurt his elbow, he wanted to cry, but kept his tears in (boys don't cry).
- Ismail is the same sex as Herman, which increases the likelihood of learning the gendered behaviour.

Possible AO3 discussion:

- Evidence for direct reinforcement of gender-appropriate behaviours from a young age: adults gave gendered toys and encouragement depending on whether the baby was dressed as a boy or a girl.
- Children aged 8–9 were shown film clips in which boys and girls were seen selecting an apple or pear. Later, boys chose the fruit they had seen the boys in the film selecting and girls chose the fruit the girls had selected, which demonstrates the influence of modelling.
- In the same study, children did not imitate gender-inappropriate behaviours, such as a man wearing a dress, which is in line with gender schema theory and unexplained by SLT.
- SLT emphasises the role of the environment in gender development and can therefore explain changing gender roles in Western society since the 1950s, when sex-role stereotypes were more pronounced than today. Changes in law have increased women's rights, and expectations (and reinforcements) of acceptable gender-appropriate behaviours have shifted. The biological approach's emphasis on the role of chromosomes and hormones in gender development can't explain these differences.
- The case study of David Reimer contradicts SLT's explanation of gender development: the biological influence of David's chromosomes and prenatal hormones were the determining factor in his gender identity.

Credit any relevant material.

11. Marks for this question: AO1 = 6, AO3 = 10

This question is level-marked:

Level	Marks	Description
4	13–16	<ul style="list-style-type: none"> • Knowledge of biological explanations for gender development is accurate and generally well detailed. • Discussion is thorough and effective. • Minor detail and/or expansion of argument is sometimes lacking. • The answer is clear, coherent, and focused. • Specialist terminology is used effectively.
3	9–12	<ul style="list-style-type: none"> • Knowledge of biological explanations for gender development is evident but there are occasional inaccuracies/omissions. • Discussion is mostly effective. • The answer is mostly clear and organised but occasionally lacks focus. • Specialist terminology is used appropriately.
2	5–8	<ul style="list-style-type: none"> • Limited knowledge of biological explanations for gender development is evident. • Focus is mainly on description. Any discussion is of limited effectiveness. • The answer lacks clarity, accuracy, and organisation in places. • Specialist terminology is used inappropriately on occasions.

1	1–4	<ul style="list-style-type: none"> • Knowledge of biological explanations for gender development is very limited. • Discussion is limited, poorly focused or absent. • The answer as a whole lacks clarity, has many inaccuracies, and is poorly organised. • Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

Possible AO1 content:

- Gender refers to a person's sense of maleness or femaleness, which is a psychosocial construct.
- The sex chromosomes (usually XX or XY) determine biological sex and influence gender, partly because external genitalia have a strong influence on how individuals are socialised, and partly due to the link to hormones.
- Gender development is largely governed by hormones.
- Differences in the brains of males and females are thought to arise largely through the actions of hormones.
- Testosterone levels cause sex differences in the amygdala, the parahippocampus, and the occipital cortex.
- Testosterone is the main sex hormone produced by biological males, it causes behavioural effects with a link to aggression.
- Testosterone has been found to influence activity interests in childhood and adulthood, and to influence occupation choices.
- Oestrogen in biological females develops physical characteristics from puberty onwards, such as breast development and widening of the hips. The physical changes are often associated with femininity and contribute to a sense of gender identity.
- Oestrogen can cause behavioural effects such as heightened emotions and irritability during the menstrual cycle, known as premenstrual syndrome (PMS).
- Oxytocin is a hormone produced from the pituitary gland in both males and females. Females produce large amounts of oxytocin when giving birth, which promotes bonding with the baby and lactation (for breastfeeding).
- Females produce oxytocin when stressed, causing a 'tend and befriend' response.

Possible AO3 discussion:

- Case study of David Reimer demonstrates the influence of chromosomes on gender identity. Despite surgery and socialisation to be female, the influence of David's chromosomes and prenatal hormones were a strong determinant in his sense of maleness.
- Post-mortems on the brains of trans people have found that the size of the BSTc (central subdivision of the bed nucleus of the stria terminalis) correlated with gender identity rather than biological sex, which could explain why some people develop a gender identity opposite to their biological sex at birth.
- A study found that male offenders with the highest levels of testosterone were more likely to have committed violent or sexually motivated crimes. Another study found that when transgender females

were injected with hormones of the opposite sex, their aggression and visuo-spatial skills decreased. Transgender men experienced the opposite. The studies suggest that sex hormones influence behaviour.

- Inconsistent evidence for the role of testosterone in aggression: many studies show a positive relationship between testosterone and aggression. However, no correlation was found between testosterone levels of prison inmates and actual violent behaviour while in prison, suggesting the relationship between testosterone and aggression in humans remains unclear.
- The effect of testosterone on behaviour: researchers found that female monkeys exposed to testosterone during prenatal development displayed more typically masculine characteristics such as rough and tumble play and were more aggressive than other females. However, in a human study, women who falsely believed they were given a dose of testosterone in a bargaining game, displayed more unfair behaviour than those who believed they were given a placebo. This provides some evidence for the role of testosterone in male behaviours, but more evidence is needed in human studies.

Credit other relevant material.

12. Marks for this question: AO1 = 6, AO2 = 4, AO3 = 6

This question is level-marked:

Level	Marks	Description
4	13–16	<ul style="list-style-type: none"> • Knowledge of gender identities including how gender has been measured is accurate and generally well detailed. • Application is effective. • Discussion is thorough and effective. • Minor detail and/or expansion of argument is sometimes lacking. • The answer is clear, coherent, and focused. • Specialist terminology is used effectively.
3	9–12	<ul style="list-style-type: none"> • Knowledge of gender identities including how gender has been measured is evident but there are occasional inaccuracies/omissions. • Application and/or discussion is mostly effective. • The answer is mostly clear and organised but occasionally lacks focus. • Specialist terminology is used appropriately.
2	5–8	<ul style="list-style-type: none"> • Limited knowledge of gender identities including how gender has been measured is present. • Focus is mainly on description. • Any discussion and/or application is of limited effectiveness. • The answer lacks clarity, accuracy, and organisation in places. • Specialist terminology is used inappropriately on occasions.

1	1–4	<ul style="list-style-type: none"> • Knowledge of gender identities including how gender has been measured is very limited. • Discussion and/or application is limited, poorly focused or absent. • The answer as a whole lacks clarity, has many inaccuracies and is poorly organised. • Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

Possible AO1 content:

- Binary gender categorises gender into two exclusive and fixed options of male and female.
- Binary gender is underpinned by biological characteristics (chromosomes, hormones, and reproductive organs) and corresponds with the biological sex an individual was assigned at birth.
- Non-binary is a gender identity that doesn't fit into the two options of male or female.
- Non-binary individuals may identify as being between male and female, or outside of them altogether, or not wanting a gender identity.
- Research on the number of non-binary individuals in the general and transgender populations vary greatly.
- Gender fluid identity falls under the non-binary classification, but there is no standard definition.
- Gender fluidity is unfixed, dynamic and expressed in a personal way, which may include through clothing, makeup and pronouns, etc.
- Gender fluid gender expression and/or identity may change regularly or over time.
- Gender has been measured through the Bem Sex Role Inventory (BSRI).
- The BSRI also measures 'androgyny', which is a personality type that has a balance of masculine and feminine traits, attitudes, or behaviours.
- BSRI was pioneering in acknowledging that biological sex does not necessarily reflect a person's masculine or feminine traits.
- The BSRI was devised by asking male and female undergraduates to identify desirable personality traits for men and women (e.g. 'assertive' for men, 'loyal' for women). The list was made into a questionnaire of 20 'masculine', 20 'feminine', and 20 neutral traits.
- Respondents rate themselves between 1 (not true) and 7 (always true) on each item and are classified as follows: high masculine, low feminine score = masculine; high feminine, low masculine score = feminine; high masculine, high feminine score = androgynous; low feminine, low masculine score = undifferentiated.

Possible AO2 application:

- Daniel's gender identity is binary (male) as seen by his pronouns, he/him.
- Daniel's binary sex matches his chromosomes (XY) from birth. Daniel's clothing choices (stereotypically male) express his binary male sex.
- Leo's gender identify is likely to be gender fluid, indicated by the use of their pronouns being he/they.
- Leo's gender is dynamic and not fixed, as shown by them sometimes wearing stereotypically female clothes, makeup, and hairstyles. The word 'sometimes' indicates that their gender is not fixed and changes back and forth between male/female or somewhere in between.
- Joh's gender identity is likely to be non-binary, as shown by them choosing the pronouns they/them, indicating they don't fit into the gender binary at all.
- Joh's gender seems more fixed than Leo's, as shown by them using their new name and pronouns with all the people in their life (friends, family and teachers) and over time.
- It's likely that Joh feels their gender is outside the gender binary altogether as indicated by them feeling their clothing styles is outside of traditionally male or female clothing, and this matches how they feel about their gender.

NB students may refer to either Jon or Joh, or Jon/Joh in their answer.

Possible AO3 discussion:

- Support for the gender binary: biological definitions of sex are often based on chromosomes and hormones, with research distinguishing male and female categories.
- Support for the gender binary: biological explanations of gender also support the gender binary by linking gender traits and behaviours to biological differences between males and females, e.g. hormones that result in distinct male and female traits, such as testosterone with aggression in men, and oxytocin with bonding during stressful times in women.
- Support for the gender binary: wealth of research showing evidence of neuroanatomical differences in the brain between males and females, for example, a meta-analysis reported regional sex differences in volume and tissue density in areas including the amygdala, hippocampus, and insula.
- Support for non-binary gender: diversity in sex development poses a challenge to binary gender as individuals may not have the standard XX or XY chromosomes, or their chromosomal sex may differ to their sex characteristics, suggesting that sex is on a spectrum.
- Support for gender non-binary gender: people who identify as non-binary add to this challenge, especially if they don't feel their gender is even on the spectrum, or don't have a gender at all.
- Support for non-binary gender: there are neuroscience findings that refute sexual dimorphism of the human brain, finding that they are not internally consistent for male-typical and female-typical features, but that most human brains are a mosaic of these features.
- Indigenous emphasis on non-binary: numerous indigenous communities around the world recognise a third or more genders within their societies.
- Indigenous emphasis on non-binary: In 1990, Myra Laramée, elder of the Fisher River Cree, coined the term 'Two Spirit' for people who have a third gender (or other gender-variant) social role in their

communities. These people are foundational members of their culture and seen as gifted due to being able to see through both the masculine and feminine lens.

- The BSRI has been criticised for response bias; data from 133 students found those classed as androgynous simply had higher overall scores. Scores may not represent a true difference in gender but show people's tendency to choose higher or lower scores on the Likert scale.

Credit other relevant material.

Questions on previous content

1. Marks for this question: AO1 = 2

2 marks for a clear, coherent outline of the term heredity using appropriate terminology.

1 mark for a brief or muddled outline of the term heredity.

Possible AO1 content:

- Heredity means that behaviours can be inherited from our biological parents' genes.
- Parents pass on genes that determine not only physical characteristics, but psychological characteristics such as aggressive behaviours, addiction, and schizophrenia.

2. Marks for this question: AO3 = 3

3 marks for a clear, coherent limitation of environmental determinism in explaining behaviour, using appropriate terminology.

2 marks for a limitation of environmental determinism in explaining behaviour that lacks some clarity or detail.

1 mark for a brief or muddled limitation of environmental determinism in explaining behaviour.

Possible AO3 evaluation:

- If behaviour was largely environmentally determined, then we would expect the concordance rates to be very high for both MZs and DZs due to their similar upbringings, but they aren't. Concordance rates tend to be higher for MZs than DZs, indicating a biological component to behaviour and questioning the influence of the environment on determining behaviour.
- Social learning theory identifies that behaviour is largely determined by imitating significant role models and vicarious reinforcements. However, there are also mediational (cognitive) processes involved, so there is also an element of free will in determining behaviour.
- Skinner claimed that free will is an illusion and that behaviour is determined by classical and operant conditioning and reinforcement history.

Credit any valid limitation.

3. Marks for this question: AO1 = 4, AO2 = 2

This question is level-marked:

Level	Marks	Description
3	5–6	<ul style="list-style-type: none"> Knowledge of the nomothetic approach to psychological investigation is clear and generally well detailed. Application to the topic is mostly clear and effective. The answer is generally coherent with appropriate use of specialist terminology.
2	3–4	<ul style="list-style-type: none"> Knowledge of the nomothetic approach to psychological investigation is evident. There is some effective application to the topic. The answer lacks clarity in places. Specialist terminology is used appropriately on occasions.
1	1–2	<ul style="list-style-type: none"> Knowledge of the nomothetic approach to psychological investigation is limited. Application to the topic is either absent or inappropriate. The answer as a whole lacks clarity and has inaccuracies. Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

Possible AO1 content:

- The nomothetic approach focuses on the study of large groups of people.
- It uses quantitative methods to gather numerical data, for use with statistical analysis.
- Nomothetic approaches tend to be determinist and reductionist.
- Nomothetic approaches aim to generate laws/theories of behaviour.

Possible AO2 application:

You can refer to any topic in Psychology from Years 1 or 2. Examples include:

- The biological approach takes a nomothetic approach when using drug trials, to draw conclusions like serotonin causing depression.
- Behaviourists experimented on hundreds of animals to develop the laws of learning theory.
- Cognitive psychologists tested large samples of people in laboratory experiments and made inferences about memory processes based on their performance.
- The nomothetic approach to investigating personality uses psychometric tests on large groups, such as Eysenck's Personality Questionnaire (which used factor analysis to produce personality types).

Credit other relevant material.