

A-level Psychology Summer Homework 2025

Due: Week commenting 1st September 2025

Tasks	✓
Revise / catch up on Y12 work – no excuses for when you get to Y13 You will have an assessment on <u>social influence AND attachment</u> when you return in September.	
Complete the Attachment Student Booklet (practice exam questions as revision) given in class (also attached on Google Classroom)	
Issues and Debates Comprehension Tasks	
Issues and Debates Pre-reading	
Psychology Articles Summary Tasks	
Aggression Reading Comprehension Task	
Schizophrenia Reading Comprehension Task	
Gender Reading Comprehension Task	
Practical Activity - Optional	

The following activities are related to the issues and debates module.

Depression and Gender Bias

Biological explanations of mental disorders, in particular depression, are gender-biased. Disorders like depression can be explained in terms of chemical imbalances in serotonin and noradrenaline as causing malfunctions in parts of the brain associated with emotion. When explaining why twice as many women as men are diagnosed with depression, supporters of the biomedical view tend to suggest that this is because of hormonal differences, for example postnatal depression, to show how fluctuations in female sex hormones can lead to abnormalities of mood. This might be a biased view because most doctors are men and hold stereotypes which may lead them to give certain diagnoses and that's why more women receive the diagnosis.

- 1. Which type of gender bias does this illustrate? Explain your answer.
- 2. What is the implication of this?

Culture Bias

Milgram's (1963) obedience experiment has been replicated in other countries as originally only men from the New Haven area of the US were tested. The table below shows the results (adapted from Smith and Bond 1998).

Country	Researchers	Participants	% Obedience
US	Milgram (1963)	Men (general population)	65
Germany	Mantell (1971)	Men (general population)	85
UK	Barley & McGuinness	Men (students)	50
Jordan	Shanab & Yahya (1978)	Students	62
Australia	Kilham & Mann (1974)	Women (students)	16
Italy	Ancona & Pareyson (1968)	Students	85

Questions

1.	What do the results of the studies tell us about cultural differences in people's
	susceptibility to obedience?

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3. Do the findings of these studies illustrate cultural bias? Explain your answer.

Socially Sensitive Research

Read the following examples of socially sensitive topics and then answer the questions that follow:

1. **Black runners 'have speed genes'**: Study of Kenyan athletes reignites controversy over race and sporting prowess.

According to an article in the *Guardian* newspaper <u>black athletes are 'genetically programmed' to run faster and longer than white athletes</u>. A study of the biological differences between African and European athletes was conducted by Scandinavian researchers who compared runners in Kenya and Denmark. Their findings confirm what observers have long suspected: that many Africans have greater innate stamina and speed than Europeans.

2. How to spot a murderer's brain

Another article in the *Guardian* discussed research by Adrian Raine who investigates the biological basis for criminal behaviour, which, with its echoes of Nazi eugenics, is perhaps one of the most taboo of all academic disciplines.

In Britain, the causes of crime tend to be seen as exclusively social and environmental, the result of disturbed or impoverished nurture, rather than the outcome of fate and genetic nature. In America, there seems to be more open-mindedness on the question. Raine headed to the US as there were more murderers to study than there were at home. He compared the brains of criminals and non-criminals.

3. Male sexual orientation influenced by genes

Genes are not sufficient or necessary to make men gay but do play some role in sexuality, say US researchers. Another article in the *Guardian* discusses a study of gay men in the US which found evidence that <u>male sexual orientation is influenced by genes</u>. Scientists tested the DNA of 400 gay men and found that genes on at least two chromosomes affected whether a man was gay or straight.

Questions

- 1. Consider each of the three pieces of research. Why would some people regard the claims that there are genetic differences between these people as socially sensitive?
- 2. Identify the implications of each of the pieces of research.
- 3. According to Aronson (1999) psychologists should not turn their backs on all socially sensitive research as this would amount to an abdication of their 'social responsibilities'. Which of the studies/lines of research do you think should have been carried out and which should not have been? Give reasons for your answers.

Issues and Debates Pre-Reading:

Nature-Nurture Debate - Interactionist Approach

Recently psychologists have begun to question whether human behaviour is due to heredity factors (nature) or the environment (nurture). It is now widely accepted that heredity and the environment do not act independently and both nature and nurture are essential for almost all behaviour. Therefore, instead of defending extreme nativist or environmentalist views, most researchers are now interested in investigating the ways in which nature and nurture interact. The **interactionist approach** is the view that both nature and nurture work together to shape human behaviour.

In psychopathology, many psychologists argue that both a genetic predisposition and an appropriate environmental trigger are required for a psychological disorder to develop; this is set out in the diathesis-stress model. The diathesis is the biological vulnerability such as being born with a gene that predisposes you to develop a disorder. However, the disorder will only develop if there is an environmental 'stressor' to trigger it. Evidence to support the diathesis-stress model comes from the Finnish Adoption Study w which compared 155 adopted children whose biological mothers had schizophrenia, with a matched group of children with no family history of schizophrenia. The researchers also assessed the quality of parenting through questionnaires and interviews. They found that the group with schizophrenic mothers had a 10% rate of schizophrenia, but they also discovered that all of the reported cases of schizophrenia occurred in families rated as 'disturbed'. When the family environment was rated as 'healthy', even in the high-risk sample (mother with Schizophrenia), the occurrence of schizophrenia was well below the general population rates. However, the environment was not the sole cause, as the low-risk children from 'disturbed' families did not develop Schizophrenia – so the environment alone was not enough to trigger the disorder. This research provides strong evidence that schizophrenia is best explained by looking at an interaction between genetic inheritance and environmental triggers, in this case, family environment.

Neural plasticity is another example of how nature and nurture interact. The brain can reorganise itself by forming new neural connections throughout life. Neuroplasticity is a term which describes the changes in the structure of the brain (nature), as a result of life experience (nurture). For example, **Maguire et al.** (2000) investigated the hippocampi volume of London taxi drivers' brains. She found that this region of the brain was larger in taxi drivers in comparison to non-taxi drivers. Consequently, Maguire concluded that driving a taxi (nurture) actually had an effect on the size of the hippocampi (nature).

Nature and nurture can interact in a variety of ways, and three separate types of gene-environment interactions have been described by **Plomin et al. (1977)**: passive, evocative/reactive, and active.

- In passive gene-environment interaction, parents pass on genes and also provide an environment, both of which influence the child's development. For example, highly intelligent parents are likely to pass on genes for intelligence to their children. They are also more likely to provide high levels of cognitive stimulation and a good education. These correlated genetic and environmental influences both increase the likelihood that their child will be highly intelligent.
- 2. In evocative gene-environment interaction, heritable traits influence the reaction of others and hence the environment provided by others. For example, a shy child (partly genetically influenced) may be less fun to other children, making other children less likely to want to spend time with him or her. This environment may result in the child becoming even more socially withdrawn.
- 3. In active gene-environment interaction, a child's heritable traits influence his or her choice of environment. For example, an aggressive child may choose to watch violent films and engage in contact sports. This is known as 'niche-picking' and is one reason research has shown that the influence of genes increases as children get older.

Gender Bias

The term bias is used to suggest that a person's views are distorted in some way, and in psychology there is evidence that gender is presented in a biased way. This bias leads to differential treatment of males and females, based on stereotypes and not real differences.

The difficulty lies in distinguishing "real" from culturally created gender differences. Evidence suggests that there are a small number of real gender differences, confirmed through cross-cultural studies. For example, in a review of the research on sex differences, **Maccoby and Jacklin (1974)** concluded that there were only four differences between boys and girls, including:

- Girls have greater verbal ability
- Boys have greater visual and spatial abilities
- Boys have greater arithmetical ability, a difference that only appears at adolescence
- Girls are less aggressive than boys

Androcentrism means being centred on, or dominated by males and can be conscious (the individual knows they are behaving this way) or unconscious. In the past most psychologists were male, and the theories they produced tended to represent a male view of the world. Hare-Mustin and Marecek (1988) argued for there being two types of gender bias: alpha and beta bias.

Alpha bias refers to theories which exaggerate the differences between males and females. For example, in his psychoanalytic approach, Freud argued that because girls do not suffer the same oedipal conflict as boys, they do not identify with their mothers as strongly as boys identify with their fathers, so develop weaker superegos.

The evolutionary approach in psychology has also been criticised for its alpha bias. This is because this approach suggests that evolutionary processes in the development of the human species explain why men tend to be dominant, why women have a more parental investment in their offspring, and why men are more likely to commit adultery. However, society has changed considerably over recent years, and it is argued that the evolutionary perspective shouldn't be used to justify gender differences.

Beta bias theories have traditionally ignored or minimised sex differences. These theories often assume that the findings from males can apply equally to females.

For example, Kohlberg's stage theory of moral development was based on extensive interviews that he conducted with boys aged 10-16. The same all male sample was then re-interviewed at intervals of 3-4 years over a 20- year period. His classification system is based on a morality of justice and some researchers, such as Carol Gilligan (1982), have found that women tend to be more focused on relationships when making moral decisions and therefore often appear to be at a lower level of moral reasoning when using Kohlberg's system. Therefore Kohlberg's approach meant that a real difference was ignored.

Even some animal research can be argued to suffer from beta bias. For example, biological research into the fight-or-flight response has often been carried out with male animals because they have less variation in hormones than females. It was assumed that this would not be a problem as the fight-or-flight response would be the same for both. However, later stress research by **Taylor et al. (2000)** has challenged this view by providing evidence that females produce a tend-and-befriend response. The beta-bias in the earlier animal studies meant that for a long time the stress response was not fully understood and a real difference was ignored.

The result of beta bias in psychological research is that we end up with a view of human nature that is supposed to apply to men and women alike, but in fact, has a male or androcentric bias. For example, Asch's (1955) conformity studies involved all male participants, as did many of the other conformity studies (e.g., Perrin & Spencer, 1980) and therefore it was assumed that females would respond in the same way.

Culture Bias

Culture can be defined as the values, beliefs and patterns of behaviour shared by a group of people.

A variety of factors shape culture and these different factors are reflected in the differences between various cultures. Historically, psychology has been dominated by white, middle-class American males, who have monopolised both as researchers and participants. However, research findings and theories have been generalised, as if culture makes no real difference.

Cultural bias is the tendency to judge people in terms of one's own cultural assumptions. In psychology, cultural bias takes the same two forms as gender bias. **Alpha bias** occurs when a theory assumes that cultural groups are profoundly different, and that recognition of these enduring differences must always inform psychological research and understanding. **Beta bias**, on the other hand, occurs when real cultural differences are ignored or minimised, and all people are assumed to be the same, resulting in universal research designs and conclusions that mistakenly assume that all cultures are the same.

Exam Hint: Alpha and beta bias are only required for Gender Bias, and while it is useful to understand these terms, you are only required to understand ethnocentrism and cultural relativism for the Culture in Psychology subtopic.

Another way to consider cultural bias is through the distinction between **ethnocentrism** and **cultural relativism**.

Free Will and Determinism

Determinism is the view that free will is an illusion, and that our behaviour is governed by internal or external forces over which we have no control. Consequently, our behaviour is viewed as predictable. The causal laws of determinism form the basis of science. An example of an external force would be the influence of parents when rewarding certain behaviours, whereas an example of an internal force would be hormones influencing the way in which someone behaves.

However, while determinism is the view that we have no control over our behaviour, there are varying degrees of determinism, including hard and soft determinism. Hard determinism is the view that forces outside of our control (e.g. biology or past experience) shape our behaviour. Hard determinism is seen as incompatible with free will. Soft determinism is an alternative position favoured by many psychologists. According to soft determinism, behaviour is constrained by the environment or biological make-up, but only to a certain extent. Soft determinism suggests that some behaviours are more constrained than others and that there is an element of free will in all behaviour. This was the view of Nick Heather (1976) who proposed that while our behaviour is predictable, that doesn't make it inevitable. We can choose how to behave, but normally we only have a limited number of behaviours to choose from.

Free will is the idea that we can play an active role and have choice in how we behave. The assumption is that individuals are free to choose their behaviour and are self-determined. For example, people can make a free choice as to whether to commit a crime or not. Therefore, a person is responsible for their own actions, and it is impossible to predict human behaviour with any precision.

Reductionism and Holism

Reductionism is the belief that human behaviour can be explained by breaking it down into simpler component parts. Those who take a reductionist position believe that the best way to understand behaviour is to look closely at the parts that make up our systems, and then use the simplest explanations to understand how they work. Reductionism is based on the scientific assumption of **parsimony**: the idea that complex phenomena should be explained in the simplest terms possible.

Parsimony is similar to the idea of Occam's Razor, which was established by William of Ockham in the 14th century. Like parsimony, this theory states that one should not make unnecessary assumptions and that the answer to a problem is often the simplest.

The reductionist approach suggests that there are different levels of explanation. The lowest level considers physiological (biological) explanations, where behaviour is explained in terms of neurochemicals, genes and brain structure; the middle level considers psychological explanations (e.g. cognitive and behavioural) and the highest level considers social and cultural explanations, where behaviour is explained in terms of the influence of social groups.

Aggression: Aggression can be explained at a biological level in terms of hormones (e.g. testosterone) or brain structure (e.g. the amygdala); at a psychological level through either operant conditioning or observation and imitation (social learning). Furthermore, it could also be explained in terms of cultural norms and expectations. This was illustrated by **Souweidane and Huesmann (1999),** who found that Detroit High School children who had been born in the United States were more accepting of aggression than children who had emigrated from the Middle East, especially if they did so after the age of 11.

Extension: An Interactionist Approach

An interactionist approach argues that several levels of explanation are necessary to explain a particular behaviour, ranging from lower (biological) to higher levels (social and cultural). Interactionism is subtly different to holism (see below), as interactionism considers how different levels of explanation interact, whereas holism is more concerned with understanding the whole experience, rather than individual explanations.

Holism comes from the Greek word 'holos', which means 'all', 'whole' or 'entire' and is the idea that human behaviour should be viewed as a whole integrated experience, and not as separate parts.

Gestalt psychology adopts a holistic approach to perception: when we perceive something in the real world, we do so as a whole rather than as a collection of bits and pieces. What we see only makes sense when we consider the whole image, rather than the individual elements that make up our vision.

Consequently, some cognitive psychologists also take a holistic approach. For example, within the area of perception, visual illusions demonstrate that humans perceive more than the sum of the sensations on the retina.

Humanistic psychology also advocates a holistic approach, as it argues that humans react to stimuli as an organised whole, rather than a set of stimulus-response links. As an approach, it uses qualitative methods to investigate all aspects of the individual, as well as the interactions between people.

Ethical Implications of Research Studies and Theories

Implications are effects or consequences, and in this section you need to understand the consequences of research studies and theory.

In year one you studied ethical issues in psychological research, for example deception, informed consent, protection from harm, etc. These are examples of ethical implications/consequences for the participants who take part in the research and psychologists are required to balance the rights of the individual participants against the need to produce research that is useful for society. However, the term ethical implications also refers to other people, and psychologists should consider the implications of their findings in a wider context.

Ethical Implications of Research Studies: If you consider Milgram's (1963) research, you need to consider whether the 'ends justify the means'. The participants were deceived and were unable to give fully informed consent. The experiment also caused significant distress, and the participants were told or coerced to continue against their will. On the other hand, the participants were debriefed after the experiment and a follow-up interview took place a year later. The outcome of these follow-up interviews suggested that the participants had suffered no long-term effects.

Ethical Implications of Theories: Bowlby's Theory of Attachment suggests that children form one special attachment bond, usually with their mother, which must take place within a critical period. Bowlby also suggested that this attachment bond affects their future relationships through an internal working model. While Bowlby's theory has contributed to the development of childcare practices, it has also encouraged the view that a women's place is at home with her children, which could make some mothers feel guilty for wanting to return to work, following childbirth.

Socially Sensitive Research

Sieber and Stanley (1988) used the term social sensitivity to describe studies where there are potential social consequences for the participants or the group of people represented by the research.

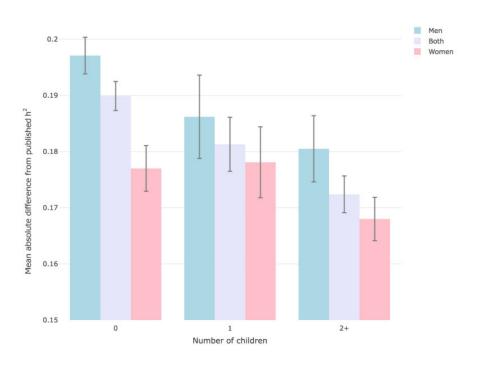
Sieber and Stanley (1988) identified four aspects in the scientific research process that raise ethical implications in socially sensitive research:

- 1. **The Research Question:** The researcher must consider their research question carefully. Asking questions like 'Are there racial differences in IQ?' or 'Is intelligence inherited?' may be damaging to members of a particular group.
- The Methodology Used: The researcher needs to consider the treatment of the participant's and their right to confidentiality and anonymity. For example, if someone admits to committing a crime, or to having unprotected sex if they are HIV positive, should the researcher maintain confidentiality?
- 3. **The Institutional Context:** The researcher should be mindful of how the data is going to be used and consider who is funding the research. If the research is funded by a private institution or organisation, why are they funding the research and how do they intend to use the findings?
- 4. **Interpretation and Application of Findings:** Finally, the researcher needs to consider how their findings might be interpreted and applied in the real-world. Could their data or results be used to inform policy?

Also, any research linking intelligence to genetic factors can be seen as socially sensitive. For example, Cyril Burt used studies of identical twins to support his view that intelligence is largely genetic. His views greatly influenced the **Hadow Report (1926)** which led to the creation of the 11+ which was used from 1944-1976. This meant that generations of children were affected by the 11+ exam, even though there has been huge controversy regarding whether Burt had **falsified** his research data.

Nature vs Nurture: Mothers with multiple children have an intuitive grasp of behavioural genetics.

By Christian Jarrett BIOLOGICAL, EDUCATIONAL, GENETICS, POLITICAL Feb 19, 2018



Lower scores equals more accurate estimates of genetic inheritance. From Willoughby et al 2018

Several prominent psychologists have recently raised concerns that the "radical left" has a stranglehold on free speech and thought in our universities. The psychologists argue this includes biological denialism: claims that differences between individuals and groups are entirely the result of the biased system or mere social constructions. More generally, many commentators are horrified by the apparent resurgence of far-right ideologies and their twisted interpretation of genetic science.

It's timely, then, that a team of researchers, led by psychologist Emily Willoughby at the University of Minnesota Twin Cities, recently surveyed over 1000 online US participants, asking them about their personal circumstances, education, political orientation, and also to estimate the relative contribution of genes and the environment to variation in 21 different human traits, from eye colour to intelligence. This is probably the most detailed study to date of people's insights into behavioural genetics, and the findings have just been published as a pre-print at the Open Science Framework.

Comparing participants' judgments against the best estimates from the behavioural genetics literature, the researchers found a surprisingly high correlation of .77 (where 1 would be a perfect score). "People's observations and intuitions about the genetic contributions to human traits are relatively informed," the researchers said.

Participants' estimates tended to group into four main categories: physical traits (height, eye colour etc); psychological (intelligence, personality); lifestyle (obesity, blood pressure); and psychiatric (depression, ADHD etc). One interpretation of this is that when making nature/nurture judgments, people tend think in terms of these approximate categories and they infer that traits within a category are subject to a similar level of genetic influence.

General educational level, and specifically participants' genetic knowledge were related to the accuracy of their estimates, but only to a surprisingly modest degree.

What about political orientation? Left-leaning liberals estimated a greater genetic contribution to psychiatric disorders and sexual orientation compared with conservatives, while conservatives assumed a relatively greater contribution of genes to traits like intelligence and musical ability. This led to what the researchers called "a surprising sort of 'balancing out'," meaning that individuals' accuracy did not differ by political persuasion.

The researchers believe this pattern is consistent with the idea that moral judgments are central to the political split in the USA. Right-wing participants more strongly endorsed the idea that some people have more innate aptitude than others, while the left-wing participants more strongly endorsed the idea that many stigmatised traits are largely innate and should therefore be treated with fairness and compassion, not judgment.

So there was no greater biological denialism or "blank slatism" by one political wing than the other, but rather a genetic cherry-picking to suit one's own world view.

Interestingly, sexual orientation was something of an outlier in the study and the trait for which participants' intuitions diverged the most from the published literature. The researchers do not offer any speculation for why this might be. Most participants strongly overestimated the genetic contribution to this trait, but conservatives did so less than liberals.

Surprisingly perhaps, more strongly related to overall accuracy than education, politics or genetic knowledge, were gender and having children. Women were more accurate in their estimations than men, and participants with non-adopted children were more accurate than those without. The most accurate judges of all were women with multiple non-adopted children. "Mothers may be uniquely observant of their children's abilities, needs, and attributes," the researchers said.

Willoughby and her colleagues took heart from these findings. "While it is clear that social and political biases do inform the magnitude of heritability judgments, the best predictors of these judgments are education and parenthood – an encouraging prospect indeed for the public understanding of findings from behaviour genetics."

On a more sceptical note, however, this survey was based entirely on myriad correlations and can't tell us too much about what influences people's beliefs about behavioural genetics, nor how these beliefs develop through life. For instance, it's plausible that beliefs about genetic heritability shape people's political views, as much as the other way around. There may even be genetic influences on people's insights into genetic inheritance, perhaps manifested through personality, intelligence and political leanings (only the last was measured in this survey).

In terms of better understanding the roots of some of the scientifically dubious beliefs on display on our college campuses and elsewhere, we probably need studies that follow people over time and that are focused at the more extreme ends of the political spectrum – only around 4 to 5 per cent of the current participants identified as very conservative and around 16 per cent as very liberal.

These issues aside, this study makes a novel contribution to a little studied topic, and the idea that mothers have a unique insight into behavioural genetics gained through the experience of parenting will surely resonate with many readers!

 $\underline{https://digest.bps.org.uk/2018/02/19/nature-vs-nurture-mothers-with-multiple-children-have-an-intuitive-grasp-of-behavioural-genetics/}$

For the article above:

- 1. Summarise in 150-200 words.
- 2. Apply relevant issues, debates and/or approaches and say why it is relevant to the study.
- 3. Explain relevance to real world application and think of example of why this research may be beneficial to contemporary society/scientific world.
- 4. Explain how this piece of research could be socially sensitive

Your notes:

Scholars who believe nurture trumps nature also tend to doubt the scientific method.

By Christian Jarrett EVOLUTIONARY PSYCH

Aug 1, 2017

How far has evolutionary thinking permeated through academia?

One group, made up of psychologists, economists, philosophers and political scientists believes more strongly in the genetic influences on behaviour, beliefs and culture. The other group, consisting sociologists, non-evolutionary anthropologists, women's and gender studies scholars and all humanities scholars (except philosophy), believes in the primacy of environmental influences. What's more, those scholars favouring environmental accounts also tend to be sceptical of the scientific method. The findings are published open-access in the newly launched journal Evolutionary Studies in Imaginative Culture.

Joseph Carroll at the University of Missouri–St. Louis and his colleagues, including Mathias Clasen at Aarhus University, identified influential scholars in different disciplines based on their authorship of papers in their fields' leading journals. Each participant rated their agreement with 24 statements pertaining to the nature/nurture debate and gene-environment interactions. The camp favouring genetic explanations tended to agree more strongly with statements like "Human behaviour is produced predominantly or exclusively by genetically transmitted characteristics". The other camp rated more strongly items like "Human behaviour is produced predominantly or exclusively by environmental conditions, including cultural conventions."

A glimmer of hope for future consensus was found in the fact that both camps tended to answer in the affirmative to items pertaining to gene-environment interactions, such as "Human values, beliefs and feelings are produced by an interaction between adaptations shaped by selection and environmental conditions, including cultural conventions."

However, signs of consensus were somewhat undermined by the participants' open-ended comments which showed that the two camps had a different perspective on what gene environment interactions mean. For instance, on the topic of gender identity, an evolutionary social sciences scholar said: "I believe gender identity reflects a mixture of genetic and culture inputs, with the genetic being somewhat more important", while a literary studies scholar said: "I agree that biological characteristics play a role in gender-identity formation but I suppose I absolutely disagree that they do so 'predominantly'".

Perhaps most worrying, in the sense of undermining hopes of any future consensus on understanding human behaviour and culture, is that the scholars who favoured environmental and cultural explanations for behaviour also tended to doubt the scientific method: "Human behaviour is not subject to immutable laws, and, therefore, can't be studied scientifically," said a religious studies scholar. "Scientific knowledge has something to tell us about material artefacts and their production, but 'human nature', 'human experience' and 'human behaviour' are not empirically stable," said a literary studies scholar.

In contrast, scholars favouring genetic and evolutionary accounts of behaviour expressed faith in science. Carroll and his colleagues said their survey had provided a "statistical snapshot ... from a landscape constantly changing" of the diverging views on human nature and culture held by the social sciences and humanities. Their own optimistic feeling is that opinion is moving "unmistakably toward an integrated biocultural view of human behaviour".

So, will the gap between the two cultures ever be bridged? The greatest obstacle, the researchers believe, is those scholars who declare that human behaviour cannot be studied scientifically (consider the views of another ethnic studies scholar: "I don't believe in the genetic evolution of species," they wrote, "There is an imprint of divinity in each person that ensures our commonalities"). Carroll and his colleagues said "Most researchers who regard human behaviour as beyond the reach of science, or who deny that science has any special claims on the production of knowledge, have more academic respectability that creationists, but they are similar to creationists in that they step willingly outside the circle of knowledge susceptible to empirical falsification."

https://digest.bps.org.uk/2017/08/01/scholars-who-believe-nurture-trumps-nature-also-tend-to-doubt-the-scientific-method/

For the article above:

- 1. Summarise in 150-200 words.
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- 3. Explain relevance to real world application and think of example of why this research may be beneficial to contemporary society/scientific world.
- 4. Explain how this piece of research could be socially sensitive

Your notes:

Psychology ignored and depression neglected in the media's coverage of mental health research.

Lewison, G., Roe, P., Wentworth, A., and Szmukler, G. (2011). The reporting of mental disorders research in British media. Psychological Medicine, 42 (02), 435-441.

Research into some mental disorders receives disproportionate media coverage at the expense of other disorders. That's according to the first systematic study of the way the UK mass media covers mental illness. And in a wake-up call to psychology and its advocates, the analysis found that mental health research stories were biased towards neurobiological aspects of mental illness. They tended to be accompanied by commentary from medical charities, and to neglect psychosocial angles and opinion.

George Szmukler at the Institute of Psychiatry focused on coverage of mental disorders research on the BBC news website from 1999 to 2008, and in New Scientist magazine news and features from Aug 2008 to April 2010. This led to the identification of 1015 relevant stories on the BBC (102 per year) and 133 stories from New Scientist (76 per year).

The approach of Szmukler and co was to compare rates of coverage for various mental disorders against the disease burden of those disorders as measured by the World Health Organisation (WHO). Disease burden is calculated based on years of life lost due to dying early, and years of life affected by disability and loss of full health.

Providing some background context, the researchers said the UK disease burden of mental disorders is 60 per cent greater than cancer, yet in the period studied the BBC had half as many news stories on mental disorder research as compared with cancer research (in defence of the BBC, cancer is the subject of more research than mental disorders).

Comparing coverage of research into various mental disorders, both the BBC and New Scientist tended to neglect depression, which is the mental disorder with the greatest disease burden by far. The BBC also tended to neglect alcoholism, whilst focusing more on drug addiction. It also focused disproportionately more than other conditions on Alzheimer's Disease and sleep disorders.

There was also a bias in the type of research that received BBC and New Scientist attention. Seventy-five per cent of the BBC's coverage was on biological research; New Scientist showed a similar trend. "Both sources rarely reported on psychological interventions," the researchers said: on the BBC it was one per cent of stories; for New Scientist it was 1.5 per cent. The dominant approach of both outlets was to present mental disorders as neurobiological in origin. The researchers don't know what proportion of research into mental health disorders is actually psychological, but they said "it is unlikely that talking treatments, in particular, would be so poorly represented."

Most stories on the BBC were accompanied by quotes from commentators intended to provide some context, including from 973 named individuals. There was a bias towards medical commentary. The six most frequently quoted commentators included three from the Alzheimer's Society, two from the Alzheimer's Research Trust and one from SANE. Szmukler and his team said that there was a need for organisations like the Mental Health Research Network to examine ways "in which commentators can be made more readily available across the whole spectrum of mental health research."

The researchers concluded that it was important to study the way the mass media covers mental health research because the media can influence the public's perception of disorders and their perception of the value of different types of research. In turn, this can affect funding decisions by government. In this respect, it is worrying that psychological research into mental disorders was found to have received so little coverage. On a positive note, the overall quality of the analysed news stories was found to be high and to have a neutral or sympathetic tone.

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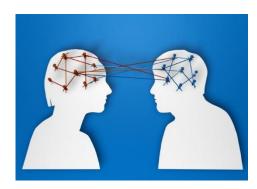
Your notes:			
			•••••

Emotionally competent teens have brains that fire "in tune" with their parents' brains.

By Christian Jarrett

BRAIN, METHODS

July 13, 2017



Up and down the land parents and teenagers are engaged in tense negotiation and diplomacy in an effort to maintain domestic peace. Some households are finding more success than others. Their secret, according to a new paper in *NeuroImage*, is a literal meeting of minds – synchronisation of brain cell firing seems to foster emotional harmony. Moreover, when parents and their teenagers display this "neural similarity", write Tae-Ho Lee and his colleagues, "this promotes youths' psychological adjustment".

These are intriguing findings – in the fact the researchers claim this is the first time that anyone has compared the brain activity of parent-child dyads with their interpersonal relations. However, sceptics will baulk at the rampant neuro-reductionism and at the paper's repeated claims of brain-based causation on the basis of purely correlational evidence.

The researchers recruited 31 teens and their primary caregiver. The latter was always either the teen's mother or father, genetically related to them. The average age of the parents was 43 years and just under 90 per cent were mothers. The teens were a roughly 50-50 mix of boys and girls, with an average age of 15.

Each parent and teen participant underwent a 6-minute brain scan in which they lay still and looked at a cross on a screen. From this, the researchers identified each person's resting state "connectome" showing the patterns of neural firing across the brain and the functional connectivity between 13 different brain networks (the researchers described this as showing each participant's "unique brain fingerprint").

For two weeks, every teen and parent also kept a daily diary, reporting their positive and negative moods. The teens also completed an "emotional competence" questionnaire about their ability to identify and describe their feelings.

Ho Lee and his team looked at the emotional synchrony between each parent-child dyad – whether they tended to report the same kinds of emotions each night or not – and found plenty of variability. Some dyads showed a lot of similarity, others were completely out of kilter. The researchers also looked at the level of similarity in the brain connectomes of each parent-teen pair, finding that some were more "neurally in-tune" than others.

The two measures correlated, as in the parent-teen pairs who showed greater emotional synchrony also tended to show greater neural synchrony. "We propose that children's neural connectome is a psychological representation at the neural systems level, resulting from shared experiences with their primary caregiver," the researchers said.

There was also a correlation between greater neural synchrony between parent and teen and the teen's level's of emotional competence.

Based on this, the researchers made repeated causal claims, such as: "dyadic brain similarity plays an important role in children's emotional competence by contributing to more synchronised emotional mood fluctuations"; and "We provide the first empirical evidence unpacking how the brain's functional

organisation is shared between individuals and influences emotional synchrony, ultimately *conferring* benefits for youths' development"; and "the degree of neural similarity in parent-child dyads promotesyouths' psychological adjustment" (all emphases added).

However, this is a purely correlational study so there's no way to know if any of the factors – parent-teen emotional synchrony, parent-teen neural synchrony, teen emotional competence – are causally related. Mediation analysis is no substitute for data derived from longitudinal and/or experimental methods. Yes, it is fascinating to see how complex emotional relations between parents and their teens may manifest at a neural level, but it seems overly reductionist and simplistic to claim that brain activity is the root cause of everything else.

Even assuming that neural synchrony between parents and teens really is an important influence on parent-teen harmony and teens' psychological adjustment, it's hard to imagine, from a clinical or everyday perspective, that this is a particularly useful or practical level at which to think about or intervene in family life.

https://digest.bps.org.uk/2017/07/03/emotionally-competent-teens-have-brains-that-fire-in-tune-with-their-parents-brains/

For the article above:

- 1. Summarise in 150-200 words.
- 2. Apply relevant issues, debates and/or approaches and say why it is relevant to the study.
- 3. Explain relevance to real world application and think of example of why this research may be beneficial to contemporary society/scientific world.
- 4. Explain how this piece of research could be socially sensitive

Your notes:

When you come back in September we are going to continue with issues and debates in psychology. In order to help you prepare, complete the following tasks:

- Find out the definitions of the following key terms/concepts and an appropriate example for each:
 - ✓ Gender bias
 - ✓ Androcentrism
 - ✓ Ethnocentrism
 - ✓ Culture bias
 - ✓ Determinism and reductionism
 - ✓ Holism and Free will
 - ✓ Advantages and limitations of qualitative and quantitative data.
- Explain what is meant by the **nature-nurture debate**. Think of an example and explain it using the nature-nurture debate.
- Explain what is meant by socially sensitive research and provide three examples of research that is socially sensitive (think back to Year 1 content).

You can use **tutor2u** for this information

Bring in evidence of all completed work with you.

Please continue on for your next tasks.

As well as Issues and debates, we'll be studying the following topics:

Aggression, Schizophrenia and Gender

Please complete the activities as follows:

Aggression

An intriguing study into sexual jealousy

Kniffin and Wansink (2012) wanted to know if the prospect of your partner's ex inviting your partner out to lunch might be enough to trigger sexual jealousy.

They recruited 79 university students (52 men and 27 women). They presented the participants with six brief scenarios involving their current romantic partner being contacted by their expartner and spending time with them. The six scenarios all began, 'Recently, your girlfriend/boyfriend was contacted by her/his ex-girlfriend/boyfriend and she/he spent approximately one hour ...'

They continued:

- ... corresponding via e-mail.
- ... talking on the phone.
- ... meeting for late-morning coffee.
- ... meeting for lunch.
- ... meeting for late-afternoon coffee.
- ... meeting for dinner.

The participants had to imagine how they would react and rate how jealous they would be in each scenario on a five-point scale from 'Not at all jealous' to 'Very jealous'.

The researchers found that the meal scenarios produced higher jealousy ratings than the coffee scenarios. Talking on the phone produced more jealousy than e-mail. Perhaps surprisingly, there were no differences between men and women in the degree of reported jealousy for any of the scenarios.

Questions

1. Why do you think meal-related scenarios triggered more jealousy than coffee-related ones?

2.	Previous research shows that men are more concerned about sexual infidelity and
	women more about emotional infidelity. Bearing this in mind, can you explain why there
	were no gender differences in this study?

3. Id	entify and	explain one	limitation	of this	study
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Reference

Kniffin, K.M. and Wansink, B. (2012) It's not just lunch: Extra-pair commensality can trigger sexual jealousy. *PloS One, 7*, e40445.

Read the following article: https://www.theguardian.com/technology/2016/mar/09/do-video-games-make-children-violent-nobody-knows-and-this-is-why

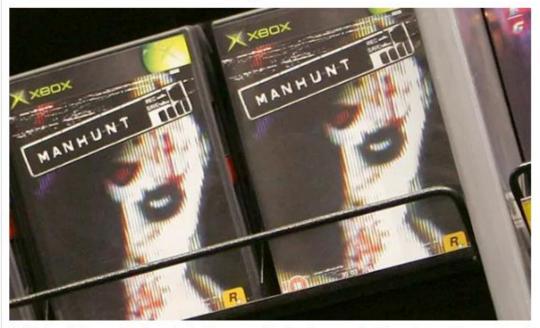
This article from the *Guardian* asks, 'Do video games make children violent?' and it gives the answer, 'Nobody knows...'.

In the table below, with the use of examples and evidence, summarise for and against arguments as to whether they you think video games make children violent.

For	Against

Do video games make children violent? Nobody knows - and this is why

The sorry state of research into one of the world's biggest entertainment industries is leaving us in the dark



Copies of the graphically violent video game 'Manhunt' were pulled from shops after parents of a teenage murder victim blamed the game for the killing of their son in July 2004. Photograph: Toby Melville/Reuters

In 1976, the driving simulation Death Race was removed from an Illinois amusement park. There had, according to a news story at the time, been complaints that it encouraged players to run over pedestrians to score points. Through a series of subsequent newspaper reports, the US National Safety Council labelled the game "gross" and motoring groups demanded its removal from distribution. The first moral panic over video game violence had begun.

This January, a group of four scholars published <u>a paper</u> analysing the links between playing violent video games at a young age and aggressive behaviour in later life. The titles mentioned in the report are around 15-years-old — one of several troubling ambiguities to be found in the research. Nevertheless, the quality and quantity of the data make this an uncommonly valuable study. Given that game violence <u>remains</u> a favoured bogeyman for politicians, press and pressure groups, it should be shocking that such a robust study of the phenomenon is rare. But it is, and it's important to ask why.

A history of violence

With the arrival of Pong in 1973, video games became a commercial reality, but now, in 2016, they are still on the rocky path to mass acceptance that all new media must traverse. The truth is that the big targets of moral concern – **Doom, Grand Theft Auto, Call of Duty** – are undeniably about killing and they are undeniably popular among male teenagers. An <u>industry report</u> estimates that 80% of the audience for the Call of Duty series is male, and 21% is aged 10-14. Going by the 18 rating on the last three entries, that means at least a fifth of the game's vast audience shouldn't be playing.

The problem is, while regulatory boards like Pegi in Europe and ESRB in the US are doing what they can to <u>inform people about age certification</u>, you have products like Mega Bloks, one of Mattel's major toy lines, featuring Call of Duty branded playsets. The question of video games and violence remains controversial because of relationships like this. Consumers, parents, the games industry itself, regulatory bodies, and the headline-hungry media – all contribute towards an era in which moral, sociocultural and developmental concerns are pitted against commercial interest.



Doom. Photograph: Id software

Over the past three decades, there have been plenty of headlines about games research, but on many occasions the studies are flawed, limited or misleading, or are simply misrepresented – often, it has to be said, by their own accompanying press releases.

'Violent videogames cause an increase in aggression long after the game has been turned off' is the headline for one 2010 study, which draws this conclusion by linking a 20-minute gaming session with an abstract aggression test 24 hours later, and differentiating between players who had 'thought' about the game in the interim and those who hadn't. This is a tenuous experimental setup in the first place and one that fails to account for any number of other factors, so to draw firm causal conclusions – never mind extrapolate (as the authors did at the time) that it is "reasonable to assume that our lab results will generalise to the 'real world'" – is fanciful.

The problem is not just on academia's side: the media almost never stops to challenge a tasty headline linking games and real-world violence. This use of games as panic fodder is not benign, but percolates into real-world flash points that have consequences. Rockstar North, the pioneering Scottish development studio behind the <u>Grand Theft Auto</u> series, also made Manhunt — a 2003 stealth-horror title that features brutal killing animations. Manhunt was erroneously implicated in a 2004 murder case by the tabloids, with MP and chair of home affairs committee Keith Vaz telling the House of Commons: "The parents of the victim believe that the perpetrator of this savage attack was influenced by the videogame Manhunt."



Manhunt. Photograph: Rockstar

The police reported that a copy of the game was found in a bedroom — but it was later discovered that the game was actually owned by the victim, Stefan Pakeerah, and the crime's motive was instead "drug-related robbery." At trial the defence, prosecution, and eventually the judge all agreed that the game was not a factor. But by this point Manhunt had already been banned by several large retailers and the link was fixed in the public mind to the point where facts didn't matter — the Daily Mail reported the eventual sentencing as "Teenager gets life for 'Manhunt murder.'" Before the evidence had emerged the paper had campaigned for the game to be banned.

When a sequel to the game was announced three years later, the response was predictable. Dogged by controversy, Manhunt 2 was subsequently refused classification by the BBFC – not once, but twice. It eventually limped out, heavily-censored, on appeal and years late. Manhunt 2 is a graphically violent game, but it's unexceptional when put next to the Saw films – and is intended for adults. It is difficult to believe that the BBFC's decision was based on the content of the game, rather than a response to media pressure. This is an extreme example but it shows how inaccurate actions can arise from inaccurate reporting, anecdote, and unwarranted inference.

The state of the art

It's in this context that January's research paper is exceptional. Entitled 'Prospective Investigation of Video Game Use in <u>Children</u> and Subsequent Conduct Disorder and Depression Using Data from the Avon Longitudinal Study of Parents and Children' it was coauthored by Dr Peter Etchells of Bath Spa University, Dr Suzanne Gage and Professor Marcus Munafò of the University of Bristol, and Dr Adam Rutherford.

"I think it started off as frustration really at all the stuff you see in the news," says Etchells. "Either studies that are overhyped or people making claims that aren't backed-up by evidence. Suzanne Gage was using this Children of the 90s dataset and we thought 'why don't we have a look in this dataset to see if there's anything we could use to look at this question.' We didn't have any funding, it's something we had to do in our spare time."

The Children of the 90s is a group of around 14,500 children born in the Avon area between 1991-1992 and observed for the Avon Longitudinal Study of Parents and Children [Alspac]. This size makes it a prime research tool, but the combination of clinical data and video game data gives it an unusual value: conduct disorder is a real-world measure of aggression, not an abstract clinical test; the video games played are differentiated by genre. This doesn't mean the dataset lacks problems, such as how useful genre classifications really are, but it's a solid foundation.

The Conduct Disorder study looks at whether children at the age of eight or nine are playing video games, what genres they're playing, and then, using statistical controls, looks at a specific measure of aggression at age 15 to see if there is any association between the two. Conduct disorder is a bunch of related negative behaviours in children and adolescents, which here is measured in six levels – from (1) extremely unlikely you have it to (6) very likely.

"This is a context-finding study rather than a causal study, so we're not saying 'you play violent videogames, you get more aggressive,'" says Etchells. "With that, what our main finding shows is that if you take these different games people have played when they're eight- or nine-years-old, and try and account for as many potential confounding variables as possible that might have an effect on aggression, socioeconomic status and stuff like that, at age 15 there is a 19% higher chance of being in one of those higher conduct disorder bands, as you go from not playing games to playing puzzle games to playing shoot-em-up games."

"Then if we take the violent/non-violent division, which I don't really like calling that, if you play shoot-em-up games there's a 19% risk of you being higher up in one of those conduct bands than if you didn't play violent games. So that doesn't mean you're going to be diagnosed with conduct disorder, it's just that you're maybe more likely to show those aggressive tendencies."

Lies and damned lies

Here we come to the difficult job of interpreting statistics, because a bald 19% may seem to indicate quite a sizeable increase – but that number represents a correlation rather than a causal factor, spread over six levels, for a disorder that you have a tiny risk of being diagnosed with in the first place (of 1,815 children in the sample, 26 met the criteria.) On top of this there are the external factors ('confounders') which the study accounts for, and the ones it doesn't – the known unknowns and the unknown unknowns.

"It's not 'if you play videogames that will cause you to have higher risk of being in a higher conduct disorder band," says Etchells. "That's just one part. If you look at the p-values [which gauge the uncertainty around the data] they're quite high at over 0.5 – so the strength of that association seems to be quite weak. It suggests there are other things that are having an effect that are driving that association."



Call of Duty: Modern Warfare 3. Photograph: AP

What the Conduct Disorder study is saying is that there's a relationship here worth looking into, but it can't point the finger at anything, and that above all the association is weak. This conclusion has to be interpreted in the context of (a) the solid data and (b) other studies arguing for a much larger and in some cases causal effect between violent videogames and aggressive behaviour. The fact these findings are so uncertain also highlights the difficulties researchers face in getting a handle on the subject.

The problem with violent video games and aggression is that defining and categorising both is an inexact science. The Children of the 90s study began in 1991, so the 'shoot-em-ups' this paper was looking at when those kids were eight or nine might be the likes of Goldeneye 007, Medal of Honor, Quake III and so on. These games are from a different and often incomparable era to the modern first-person shooter, a <u>Call of Duty</u> or Halo, which is much more realistic visually and in most cases includes a competitive online element.

The sharp-eyed will have spotted that 'shoot-em-up' is itself something of a misnomer, more commonly used to refer to 2D space blasters than 3D first-person shooting games. Such a distinction might seem rather fine, and many conflate the two, but it really matters. "In the questionnaires they asked essentially what kind of games do you play, and categorised them by genre," says Etchells. "Now the options aren't great, and it's a point that came up in review: shoot-em-up is a different category to FPS. So there are assumptions in what we've done, in the sense that if you're playing Goldeneye you're probably going to tick the 'shoot-em-up' box, even if that might not be the exact genre."

This seems a not-unreasonable assumption, though it shows how even such good data can have a troubling fuzziness up-close. But this is a broader issue for games research. "We don't have a good way of categorising games," says Etchells. "I don't think genres is a particularly good way of doing it. Technically Portal 2 would be in our shoot-em-up category here, but that's not an especially violent or competitive game. You could make an argument that certain platform games are violent, even say Mario in the sense of squashing goombas."



Portal 2. Photograph: Valve

To briefly unpack that, Portal 2 could be fairly described as a puzzle game – but one played from a first-person perspective. Your character has a 'gun,' but it fires portals onto walls rather than bullets, and is used to navigate the environments. Minor elements of the game, such as the automated turrets in some levels, mean you could argue for Portal 2 to be categorised as a first-person shooter, but the content bears so little relation to a game like Call of Duty it shows how essentially meaningless the definition is.

When you look at videogames research, it's difficult to escape the suspicion that many of these studies don't understand the different aspects and modes in a game like Call of Duty – and much more importantly, how players interact with them. Call of Duty has a single-player mode, several co-operative modes, and an online competitive mode, each of which you play with a different mindset.

"We didn't look at context massively in our study, but how you play videogames will likely have an effect on what their effect on you is," says Etchells. "So it also might be different playing a particular mode solo to playing it with loads of people in the room with you, and if those people are mates or your parents or siblings."

The Conduct Disorder study draws a distinction between competitive games and violent games, but most contemporary games defy such easy categorisation while many of the biggest hits have elements of both. What of last year's breakout hit Rocket League, which is ultra-competitive but has no violence? Some games are designed to be lifestyle commitments over months and years, like the online shooter Destiny or any given massively multiplayer role-playing game, while others last minutes. Genres are an inadequate way of categorising the nature of these experiences, and thus measuring their potential impact.

"There have been 25 years of research in this area and, for the most part, it's not very good research," says Etchells. "Particularly the experimental side. It's a real missed opportunity, because there's so much stuff about this in the media and we really don't have a handle on it, and it would be good to have a handle on it so we could maybe get a final say at some point – either no, games are not an issue or, look, games are an issue but in these populations in these situations and it's these games specifically. We can't say anything even close to that at the minute."

The funding gap

It's worth remembering that part of the problem is the reluctance of funding bodies to support researchers in this area – it's surprising to say the least that a study of this importance had to be undertaken by the researchers in their spare time. What video games research needs is more high-quality work in the field, because the questions are not impossible to answer. "The dataset we used is open and available," says Etchells. "What I'd like to see happen in this area is people doing more open science, making their data available to other researchers. Just so we can start getting it right! Because there's so much stuff that's not right out there."

The violence debate also holds us back from other, possibly more interesting, questions about this omnipresent interactive entertainment medium. There is an enormously positive side to games that receives no attention, yet the potential fruits of research could be enormous. "Take brain training games and whether they work," says Etchells. "The evidence there is quite shaky, some suggests they do work and a lot says they don't, but if there were anything there that would be novel and quite important. That's a more useful question to ask really."

Without quality research, we allow debates about videogames to be influenced by ideologically-driven sceptics. It is less than a decade since one of Britain's greatest developers, Rockstar North, had to censor Manhunt 2. Perhaps we'll look back on that the same way we look at something like A Clockwork Orange, in 1972, being blamed for various violent acts – the whipped-up reaction to which saw Stanley Kubrick request the film be withdrawn from British distribution.

Film is not the same as videogames, of course. But Kubrick's response to the charge that A Clockwork Orange was inspiring copycat violence is, in the absence of answers, an important one to consider. "To try and fasten any responsibility on art as the cause of life seems to me to put the case the wrong way around," he said. "Art consists of reshaping life, but it does not create life, nor cause life. Furthermore, to attribute powerful suggestive qualities to a film is at odds with the scientifically accepted view that, even after deep hypnosis in a posthypnotic state, people cannot be made to do things which are at odds with their natures."

Do videogames make your kids violent? No one knows and, by now, we really should have a better answer than that – don't you think?

Schizophrenia

Listen to the following podcast on how CBT is used to treat Schizophrenia (link below). This episode of BBC Radio 4's *All in the Mind* includes a short segment on how <u>CBT is used to treat schizophrenia</u>. https://www.bbc.co.uk/programmes/b01nq1cl

Token economy for schizophrenia

This is a behavioural treatment for schizophrenia, based on operant conditioning (learning through reinforcement). In a token economy, tokens are given to reward people in psychiatric institutions for performing socially desirable behaviours, the aim being to encourage self-care.

Tokens are secondary reinforcers, which are exchanged for rewards (primary reinforcers), for example food, being allowed to watch a film, and so on. Ayllon and Azrin (1968) set up a token economy with schizophrenic patients in a psychiatric institution. Patients went from performing 5 chores a day to around 40. This helps improve the quality of life for schizophrenia sufferers.

A review of the evidence for token economies for people with schizophrenia (McMonagle and Sultana 2000) found only three studies where individuals had been randomly allocated to conditions, with a total of only 110 participants. Random allocation is important in matching participants to treatment and control groups. Only one of the three studies showed improvement in symptoms.

In token economy situations many studies tend to be uncontrolled. Typically, in institutions, individuals are brought into the programme rather than having an experimental group that goes through token economy and a control group that does not. Participants' improvement therefore can only be compared to their past behaviours rather than a control group. This could mean that other factors are responsible for causing the improvement in participants (e.g. staff attention) rather than the token economy.

Questions

- 1. Explain what is meant by a 'control group'.
- 2. Explain why a control group is used in research studies.
- 3. Outline **and** compare token economies with another treatment for schizophrenia choose from drug therapy or CBT.

Reference

McMonagle, T. and Sultana, A. (2000). Token economy for schizophrenia. Cochrane Database of Systematic Reviews, (3).

Gender

Read the following studies and answer the questions.

Slaby and Frey (1975) Gender concept interview

Slaby and Frey (1975) interviewed 55 children aged between two and five-and-a-half years to see if they matched the stages suggested by Kohlberg. They used a structured interview technique called the *Gender Concept Interview*.

The children were asked questions such as, 'Is this doll a boy or a girl?' when shown a boy or girl doll or 'Are you a boy or a girl?' to assess gender identity. To assess gender stability they were asked questions about whether they would be a mummy or a daddy when they grew up, and 'When you were a little baby were you a little girl or a little boy?' or 'Could you ever be a Mummy or a Daddy?' To test gender constancy they were asked whether they would be a boy or a girl if they wore opposite-gender clothes or played with opposite-gender toys, and questions like 'Could you be a boy/girl if you wanted to be?'.

The responses the children gave matched the stages proposed by Kohlberg.

Children were classified as low in gender constancy if they answered incorrectly on the gender labelling or gender stability items. Later the children were shown a short film showing a man and a woman doing the same activities on different sides of the screen. The amount of time that children's eyes watched the same-gender model was measured.

They found that children with higher levels of gender constancy paid more attention to samegender models.

These are the results found by Slaby and Frey:

Table: Mean (SD) percentage of model-watching time spent watching the man rather than the woman (standard deviation in brackets).

Gender of participant	Low level of gender constancy (Stages 1 & 2)	High level of gender constancy (Stage 3)
Boys	47.9 (8.5)	61.4 (9.6)
Girls	57.8 (9.9)	50.8 (11.7)

Questions

1.	Explain what is meant by a 'structured interview technique'.
2.	Describe the way Slaby and Frey studied gender development.
3.	Outline one methodological problem with asking children questions about gender.
4.	Outline one further limitation with the method Slaby and Frey used.
5.	Outline two strengths of their method.
6.	What are the problems with categorising children in these stages?
7.	What conclusions can you draw from the data in the table?

8.	Put the data in the table into a graph.	
0	Why are standard deviations often used as well as the mean?	
9.	Why are standard deviations often used as well as the mean?	
10	. Suggest an appropriate statistical test to use to analyse this data. Give reasons for your	
	answer.	
Refere	ence	
Slaby, R. G. and Frey, K. S. (1975). Development of gender constancy and selective attention to same-gender models. <i>Child Development</i> , <i>46</i> , 849–856.		

Evidence supports gender schema theory

Boston and Levy (1991) investigated whether knowledge about gender stereotypical activities was different for boys and girls. They used a quasi-experimental method. They compared girls' and boys' ability to assemble sequences of pictures in the correct order. The sequences showed activities that were stereotypically consistent with being a boy or a girl (e.g. cooking the dinner or doing DIY). The children had to sequence four pictures. The children were better at sequencing the activities that corresponded stereotypically to their own gender. This suggests that they had a more developed understanding of activities that were relevant to them.

sequencing the activities that corresponded stereotypically to their own gender. This suggests that they had a more developed understanding of activities that were relevant to them.		
Questions		
1. How does this study support gender schema theory?		
2. State the aim of this study.		
3. Write a suitable hypothesis for this study.		
4. Identify the IV and the DV in this study.		
5. Boston and Levy's study is an example of a quasi-experiment.		
a. Explain why this is an example of a quasi-experiment.		
 Give two strengths and two limitations of the quasi-experimental method in the context of this study. 		
6. What would be an appropriate statistical test to use to analyse the findings from this study? Explain your answer.		

Reference

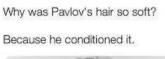
Boston, M. B. and Levy, G. D. (1991). Changes and differences in pre-schoolers' understanding of gender scripts. *Cognitive Development*, *6*, 417–432.

Practical Activities

Choose 2 activities from the following options:

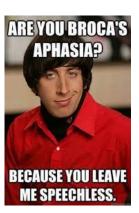
1. Create a series of psychology puns and/or psychology memes so that I can add these to my display (create ~3 of these). Email me your memes!

Example:





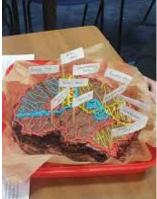




2. Bake a brain cake/cupcakes and then label the cake with the following labels: frontal lobe, parietal lobe, temporal lobe, occipital lobe, Broca's area, Wernicke's area, somatosensory area. Take a picture of this so I can add this to my display board

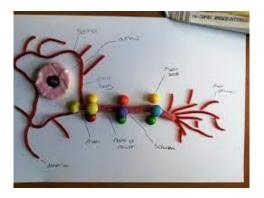
Example:

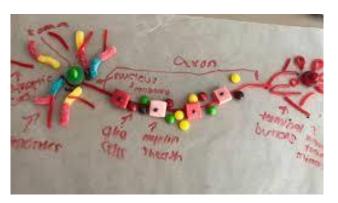






3. Design a neuron out of play dough / sweets (you can use strawberry laces, jelly tots, jelly beans, smarties etc.) and label it – take a picture and email it to me (I will also add these to my display).





4. Write a film review on the any of the following films you can access/if you have access to:

12 Angry Men (U)

Specification Links: A Level Paper 1 - Social Psychology; Minority Influence. Story line: A jury deliberates behind closed doors on the fate of someone accused of murder. One lone dissenter within the jury (played by Henry Fonda) pleads a compelling case to convince the other eleven jurors that this is not a clear-cut case, unveiling and challenging prejudices and preconceptions as they arise in the debate.



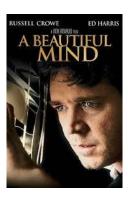
The Experimenter (12)



Specification Links: A Level Paper 1 – Social Psychology; Obedience to Authority, Explanations for Obedience, Milgram. A Level Paper 2 – Research Methods; Experimental Method, Types of Experiments. Story line: Based on the true story of Stanley Milgram's academic investigations on obedience to authority at Yale University during the 1960s. Shows simulated and archived footage of his original experiment as detailed on the specification as well as other investigations such as the lost-letter experiment.

A Beautiful Mind (PG)

Specification Links: A Level Paper 1 – Psychopathology; Definitions of Abnormality, A Level Paper 3 – Schizophrenia; Diagnosis and Classification of Schizophrenia, Explanations for Schizophrenia, The Interactionist Approach to Schizophrenia. Story line: The film follows the life of John Forbes Nash, a maths genius, who suffers from a severe mental illness, the symptoms of which are consistent with schizophrenia. As the story progresses, the difficulties of coping are portrayed alongside the importance of having social support in dealing with the disorder.



50 First Dates



Specification Links: A Level Paper 1 – Memory; Short-Term Memory, Long-Term Memory, Encoding, Capacity and Duration, Explanations for Forgetting. Story line: This film follows Drew Barrymore's character as she suffers with short-term memory loss following a car accident. Her family go to elaborate levels to help her avoid the grave reality of her condition and collude in her belief that time has stopped and restarted over and again every 24 hours.

Towards the end of the film there is a glimmer of hope that she is, in fact, able to encode new memories and fall in love with Adam Sandler's character.

5. Create a crossword of an area in psychology (I will print these off for the class to do when we come back).

