DP IB Psychology: HL

Etiology of Abnormal Psychology: Explanations for Disorders

Contents

What is Major Depressive Disorder (MDD)?

What are the Characteristics of Major Depressive Disorder?

- **Low mood** which is **persistent** and ongoing
- The inability to take pleasure in life, even from experiences or activities that usually promote pleasure e.g. *I used to love swimming every morning but now it fills me with no joy at all*
- Intense, overwhelming feelings of **sadness, self-blame, guilt, worthlessness, hopelessness**
- The inability to take action or make decisions
- An absence of **motivation** and/or sense of purpose, an increase in **apathy**
- Sleeping more than usual or, conversely, restlessness and **insomnia**
- Loss of **appetite** or, conversely, **comfort eating**

How does MDD impact the life of the depressed person?

- MDD can become a blight on someone's life as it impacts their ability to conduct their life as they normally would, impacting everyday routines as well as pleasurable activities and experiences
- MDD can adversely affect **relationships** e.g. low mood may lead to the depressed person expressing anger towards others; the depressed person's lack of interest in life means that they are unlikely to want to engage in activities with others
- MDD can lead to the depressed person wishing to **withdraw** from life which has obvious implications as to their working life as well as their relationships
- MDD has been identified as one of the leading factors in disability across the world (The National Library of Medicine, June 2022)
- MDD can be the trigger for **comorbidity** as it may be the gateway into other disorders e.g. **substance abuse disorder, anxiety disorders**
- MDD may exacerbate existing medical conditions such as **heart disease, diabetes, hypertension**
- MDD brings with it the risk that the depressed person will engage in **self-harm** which could escalate potentially to them being vulnerable to **suicide**

How prevalent is MDD?

- MDD is one of the most **prevalent** mental disorders, having a **lifetime prevalence** of 5–17% (National Library of Medicine, June 2022)
- MDD is often referred to as the '**common cold of mental disorders**' (Psychology Today, November 2008) as it affects large numbers of people at any given time
- Women are more likely to report depressive symptoms than men
- Men may under-report or ignore depressive symptoms due to a range of factors e.g. not wishing to 'make a fuss', **social conditioning** which may suggest that depression is not 'manly', not having the language to be able to discuss feelings in the same way that women do
- An estimated 21.0 million adults in the USA had at least one **major depressive episode** i.e. 8.3% of all U.S. adults in 2021 (The National Institute of Mental Health, July 2023)
- MDD affects all sectors of society: being wealthy or successful does not safeguard someone against developing MDD
- MDD may be expressed or reported in different ways according to **culture**

Which studies investigate MDD?

- **Caspi et al. (2003) –** a biological explanation of MDD
- **Grazioli & Terry (2000) –** a cognitive explanation of MDD
- **Lewinsohn et al. (1990) –** a sociocultural explanation of MDD

All three of these studies, Caspi et al. (2003), Grazioli & Terry (2000) and Lewinsohn et al. (1990) are available as Key Studies of Explanations of MDD – just navigate the Explanations for Disorders section to find them.

Biological Explanations of Major Depressive Disorder (MDD)

The genetic explanation of MDD

- All **biological** explanations of MDD take the 'nature' side of the **nature/nurture debate** which assumes that human behaviour is the result of **innate, inherited traits**
- A **genetic** explanation of MDD may be found by investigating rates of **heritability** within families i.e. the extent to which genes may be responsible for someone developing MDD
- Historically, **twin studies** and **adoption studies** have been used to determine the likelihood of one person developing a condition such as MDD if their twin or their biological parent also has the condition
- **Concordance rates** are used to measure the strength of 'agreement' between pairs e.g. McGuffin et al. (1996) found high concordance rates for MDD between **monozygotic (MZ) twins** compared to **dizygotic (DZ) twins** (see the revision note on Two Key Studies of Genetic Similarity on this site)
- **Polymorphism** in the **5-HTT gene** may be another genetic explanation for MDD (Fratelli et al. 2020) as it is thought that variations or adaptations in this gene may affect the likelihood of someone becoming depressed (this explanation also crosses over into the neurochemical explanation - see below)

Evaluation of the genetic explanation of MDD

Strengths

- Twin and adoption studies tend to use large samples, generating **robust quantitative data** which increases the **reliability** of the findings
- Concordance rates provide clear data which is easy to compare and analyse, highlighting **patterns** and tendencies e.g. higher concordance rates of depression between MZ twins

Weaknesses

- If the genetic explanation was completely **valid** then concordance between MZ twins should be 100% but this has not been found in any research study
- The influence of the **environment** cannot be ruled out as even MZ twins will not experience life in exactly identical ways e.g. they may be treated slightly differently by their parents; they may have different friends or develop different interests i.e. identical **genotype**; different **phenotypes**

The neurochemical explanation of MDD

- All **biological** explanations of MDD take the 'nature' side of the **nature/nurture debate** which assumes that human behaviour is the result of **innate, inherited traits**
- A **neurochemical** explanation of MDD may be found by investigating **neurotransmitters** and their effect on behaviour
- **Polymorphism** in the **5-HTT gene** also provides a **neurochemica**l explanation for MDD as genetic variation in this gene has been linked to the **monoamine hypothesis**
- Monoamines are chemicals containing **amino acids** which transport **serotonin** and other neurotransmitters around the brain
- Serotonin is implicated in **mood disorders** such as MDD i.e. low or irregular levels of serotonin have been linked to **depressive symptoms**
- Evidence to support the monoamine hypothesis can be found in the action of **Selective Serotonin Reuptake Inhibitors (SSRIs)** which work to prevent the reabsorption of serotonin into the **neuron**, ensuring that these extra serotonin **molecules** cross the **synaptic gap** to the **post-synaptic neuron**
- SSRIs are widely prescribed for depressive disorders highlighting a clear link between their use and the monoamine hypothesis i.e. serotonin may play a role in the onset and experience of MDD

Evaluation of the neurochemical explanation of MDD

Strengths

- There is clear research support for the monoamine hypothesis (Barchus & Altemus, 1999) based largely on the role of SSRIs in treating depression
- If the monoamine hypothesis is valid then this is good news as **drug treatment** in the form of SSRIs is cheap and widely available for clinicians to prescribe

Weaknesses

- The monoamine hypothesis is still being debated as a valid explanation for MDD: some increasing levels of **GABA** can help to alleviate symptoms of depression (Goldberg et al. 2014)
- **Antidepressants** such as SRRIs do not work for everyone; research has found that only one third of patients responded positively to SSRI treatment (Trivedi et al. 2006)

Which studies investigate a biological explanation of MDD?

- **McGuffin et al. (1996): genetic explanation –** concordance rates for MDD are higher for MZ twins than for DZ twins
- **Caspi et al. (2003): neurochemical explanation –** a genetic variant of the 5-HTT serotonin gene combined with stressful life events may be implicated in MDD

  Both McGuffin et al. (1996) and Caspi et al. (2003) are available as Two Key Studies of Biological Explanations of MDD – just navigate the Explanations for Disorders section to find them.

Two Key Stuides of Biological Explanations of Major Depressive Disorder

Your notes

McGuffin et al. (1996)

Key study one – (Genetic Explanation): McGuffin et al. (1996)

Aim: To investigate **concordance rates** for **MDD** in **MZ** and **DZ** twins.

Participants:

- 177 twin **probands** who were registered between 1948 and 1986 with the Maudsley Hospital in London as suffering from MDD
- The same-sex twin siblings of each proband were used as **comparison** participants

Procedure:

- The twins were assessed by **clinicians** via a series of tests and **interviews** (about their emotional state, their mood etc.) by **blind** researchers i.e. the researchers were unaware as to whether the twin was MZ or DZ
- The blind researchers were also blind as to whether each twin had MDD
- The **data** also consisted of the twins' medical records

Results:

- MZ twins showed a 46% concordance rate for MDD compared to 20% in DZ twins
- Shorter periods of depression in one MZ twin was matched by similar depression in their twin sibling
- MZ twins aged 65+ showed heightened levels of MDD compared to the general population

Conclusion:

- MDD may be highly **heritable** rather than a product of **environmenta**l factors
- Short-term MDD in one MZ twin appears to increase the probability of their MZ twin sibling also developing MDD, which reinforces the idea that depression is genetic

Evaluation of McGuffin et al. (1996)

Strengths

- This was a **longitudinal** study, conducted over decades which means that it is high in validity as the participants could be tracked over time to look for real differences in behaviour
- The use of a blind interviewer/researcher means that the study was free from **bias** which increases the **validity** of the findings

Weaknesses

- The concordance rate for MZ twins was 46%: if depression is entirely genetic then it should show a 100% concordance rate
- This research was conducted prior to **DNA** testing so it is possible that some of the MZ twins may actually have been DZ i.e. they may have *looked* identical but in fact have been biologically non-identical

Caspi et al. (2003)

Key study one – (Neurochemical Explanation): Caspi et al. (2003)

Aim: To investigate the link between the **alleles** of the **5-HTT serotonin transporter gene** and **MDD**.

Participants:

- An **opportunity sample** of 847 participants aged 26 years
- The sample was split into three groups, depending on the length of the alleles on their 5-HTT transporter gene:
  - Group 1 – two short alleles
  - Group 2 – one short and one long allele
  - Group 3 – two long alleles

Procedure:

- The participants were asked to report any **stressful** life events that had taken place between their 21st birthday up to their 26th birthday
- The **Diagnostic Interview Schedule** was used to assess incidences of depression over the past year
- The researchers carried out **correlational analyses** between the following **co-variables**:
  - each participant's stressful life events and incidences of depression;
  - the length of each participant's alleles and incidences of depression;
  - **perceived** stress and the length of each participant's alleles.

Results:

- The highest number of depressive episodes in response to stressful life events was reported by the participants who had two short 5-HTT alleles compared to the other two groups
- The participants with two long alleles reported fewer depressive symptoms overall

Conclusion:

- There may be a **relationship** between short 5-HTT alleles and MDD - i.e. stressful life events are more likely to trigger MDD in people with this **genetic make-up**
- Long 5-HTT alleles may provide protection against stress-induced depression as this may be linked to a regular supply of serotonin to the brain
- The onset of MDD appears to be an interaction between environment (stressful events) and genetic make-up

Evaluation of Caspi et al. (2003)

Strengths

- The possible link between the 5-HTT serotonin transporter gene and propensity to depression means that **genetic screening** could be conducted to help protect those with short alleles and to provide them with **treatment** as a **preventative measure** against MDD
- Conducting three separate correlational analyses means that each measure is checked by the findings of the other measures which should ensure **internal validity**.

Weaknesses

- The experience and **aetiology** of depression is complex and may be due to a number of factors, both **biological** and non-biological which makes this study somewhat **reductionist** as it provides an overly simplistic explanation
- Using a **self-report** to collect data is prone to **bias** (e.g. **social desirability bias, response bias**) which reduces the validity of the findings

Cognitive Explanations of Major Depressive Disorder (MDD)

Beck's Cognitive Triad explanation of MDD

- The **cognitive approach** to explaining behaviour focuses on processes such as **thinking and decision-making, memory, information processing** and **perception**
- The cognitive approach to explaining MDD assumes that depression is a result of faulty or **irrational thought processes** which may lead to the depressed person over-using **cognitive biases** in their thinking
- **Beck (1963)** developed an explanation of MDD known as the **cognitive triad** which was based on conclusions he had drawn from working with depressed patients over a number of years
- The cognitive triad is divided into the following:
  - Negative thoughts about the self
  - Negative thoughts about the world
  - Negative thoughts about the future
- Depressed people tend to irrationally personalise the world and events that happen to them e.g. '*The world hates me'; 'Even the bus hates me, it didn't stop for me this morning'*
- Depressed people will always seek out the negative in any situation e.g. 'I may have got a promotion but it will mean more work for me to have to take on' (an example of **negative automatic thoughts**)
- Depressed people also engage in **catastrophising** (e.g. *'I got a low mark for this essay which means I'm going to fail the IB and end up homeless and broke'*); **overgeneralisations** (e.g. '*I had a date last night but it didn't go well so what's the point of dating at all?)*
- Beck suggested that irrational and faulty thought processes as seen in the cognitive triad could be a result of adverse childhood experience (see **early maladaptive schemas** below)
- Beck proposed a **diathesis-stress** component of his theory which states that some people are naturally predisposed to developing MDD which makes them vulnerable to **environmental stressors** (e.g. one person may fall into a deep depression if they lose their job whereas a different person may feel no such low mood and may even **frame** the event positively)

Evaluation of Beck's cognitive triad explanation of MDD

Strengths

- There is good research evidence to support Beck's theory e.g. Bothwell and Scott (1997) found that cognitive biases were linked to symptoms of depression
- The theory has good application for **treating** depression e.g. **CBT (Cognitive Behavioural Therapy)** is used to identify, challenge and change irrational thoughts so that MDD symptoms recede

Weaknesses

- Beck's theory is useful for highlighting *what* characterises irrational thinking but not *why* such thoughts occur or where they come from so in this respect the theory lacks some **explanatory power**
- Beck's theory may not be **generalisable** to **collectivist cultures** with its emphasis on individual experience and one-to-one therapy

Early Maladaptive Schema Theory Explanation of MDD

- This theory takes some core ideas and concepts from Beck's theory of depression (e.g.irrational thoughts about the self which Beck termed **negative self-schemas**) but it focuses its attention squarely on the influence of childhood experience as an explanation of MDD
- An **Early Maladaptive Schema (EMS),** proposed by **Young (2006)**, is a type of **self-schema** in which a person's early, childhood experience forms the basis for their **self-image, self-esteem** and general well-being
- An EMS may develop if a child is abused, neglected or placed into situations which are distressing and/or unpredictable
- An EMS is stable – which means it is resistant to change – and consists of long-term beliefs about the self which are very difficult to eradicate, even if the person undergoes years of **therapy** or **counselling**
- An EMS may well lead to the development of a **mental disorder** such as **Major Depressive Disorder (MDD)** or **anxiety disorders**
- Types of EMS include:
    - **Abandonment** (which develops if someone feels that their caregivers are unreliable and/or cold and unloving)
    - **Defectiveness** (which develops if someone has been told that they are not worthy of love, that they are bad, that people will reject them)
    - **Failure to Achieve** (which develops if someone believes that they are doomed to always fail and that others are better than them)
- An EMS is likely to prevent an individual from realising their true potential (**self-actualisation**) as it erects obstacles to their success, happiness and fulfilment

Evaluation of the Early Maladaptive Schema explanation of MDD

Strengths

- The concept of negative self-schemas formed the basis for early **cognitive behavioural therapy** so it has some useful **application** to mental health settings
- Research by Sojta & Strzelecki (2023) highlights the importance of understanding how EMS impact parenting, the findings of which could be used as a preventative measure against **generational** MDD

Weaknesses

- It is difficult to **operationalise** and measure schemas which means that research on EMS can lack **reliability**
- A therapist would have to take great care when discussing a patient's EMS as such a discussion may result in some **traumatic** memories being revisited which means that only suitably qualified professionals should attempt this type of assessment

Which research studies investigate cognitive explanations of MDD?

- **Beck et al. (1974): Beck's Cognitive Triad –** investigated cognitive distortions in patients with MDD
- **Riso et al. (2006): Early Maladaptive Schemas –** found that EMS are stable and long-lasting and should be treated using suitable therapy

Beck et al. (1974) and Riso et al. (2006) are available as Two Key Studies of Cognitive Explanations of MDD – just navigate the Explanations for Disorders section of this site.

Worked Example

The question is, *'Evaluate research into one or more cognitive explanations of MDD'. [22]*

The command term 'Evaluate' means that you should give a detailed account of the strengths and limitations of one or more cognitive explanations of MDD.

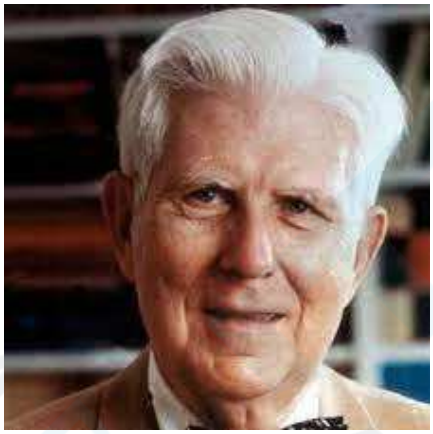
Here are two exemplar paragraphs for guidance:

Young's (2006) theory of Early Maladaptive Schemas explains MDD as being the result of early childhood experience, specifically negative or adverse influences on the developing child e.g. abuse or neglect. Riso et al. (2006) sought to explore the stability of EMS beyond childhood, using multiple measures (interviews and questionnaires which measured levels of depression,, EMS, dysfunctional attitudes, attributional style and neuroticism). The use of more than one measure and more than one type of data is known as triangulation of method/data which increases the reliability of the data as one measure checks another measure for agreement and consistency.

Riso et al.'s (2006) research investigated the experience of adult participants living with MDD and yet the only methods employed in the study consisted of clinical, questionnaire-based interviews which generated quantitative data. While this type of data makes analysis and comparison easy e.g. a correlation coefficient of 0.75 for EMS and MDD (a strong positive correlation), it lacks the explanatory power of qualitative data. Including qualitative data in the research would have been more time-consuming, both to collect and to analyse, but it would serve to enable researchers to gain a more meaningful insight into the nature of MDD via the reported experience of the participants.

Two Key Studies of Cognitive Explanations of Major Depressive Disorder (MDD)

Beck et al. (1974)



Aaron Beck: highly influential in researching depressive disorders.

Key study one (Beck's Cognitive Triad): Beck et al. (1974)

Aim: To investigate the role of **cognitive distortions** in patients with **MDD.**

Participants:

- 50 patients with MDD (34 female; 16 male; aged 18–48 years, **median**=34 years)
- The **social demographic** of the sample was designated as 'middle to upper class'
- A **control group** of 31 non-depressed patients who were undergoing **psychotherapy**
- The control group had been **matched** to the MDD group on the **variables** of age, gender and social demographics

Procedure:

- **Clinical interviews** were conducted with both groups
- The participants were asked to report on their feelings before the session and to spontaneously contribute their thoughts and feelings throughout the session
- Some of the patients logged their thoughts in diaries or journals which they brought to the sessions

- The therapists kept note of what both groups of patients said during the sessions which then formed the basis of their comparison of the two groups

Results:

- There were distinct differences between the **verbalisations** and conversational content of the MDD patients compared to the control group patients
- The content of the MDD patients' verbalisations included a high number of references to the following **themes**:
  - High anticipation of **physical harm and danger**
  - Fear of becoming ill
  - High anticipation of being rejected or attacked by others
  - A **self-blaming bias** e.g. feeling that others were more attractive, successful and content than they were and that these 'failures' were due to their own ineptitude and **inferiority**
  - A **negative self-schema** in their beliefs that they were unlovable, that no-one would want to be with them
- These cognitive distortions appeared to be beyond the control of the MDD patients, being **automatic** and persistent
- The MDD patients expressed **belief** in their cognitive distortions, they found the distortions plausible and inevitable

Conclusion:

- Patients with MDD suffer from cognitive distortions which cloud their thinking and impede **logic** and **rationality**
- The cognitive distortions experienced by the MDD patients appeared to only relate to MDD and not to other disorders such as **anxiety**

Evaluation of Beck et al. (1974)

Strengths

- The use of the clinical interview generated **rich, thick, insightful qualitative data** which has strong explanatory power
- The findings have good **application** i.e. they can be used in **therapeutic settings** to specifically target the key mechanisms by which MDD affects patients

Weaknesses

- A sample size of 50 MDD patients is small which means that the findings from this study are unlikely to **represent** the experience of a larger population of MDD patients hence they lack **generalisability**
- The concept of cognitive distortions may be overly **subjective** as each person's thought processes and patterns are likely to differ from another person's which mean that the research may lack **reliability**

Riso et al. (2006)

Key study one (Early Maladaptive Schemas): Riso et al. (2006)

Aim:

- To investigate the extent to which **Early Maladaptive Schemas** (**EMS**) are stable over time
- To investigate the role of EMS in the experience of MDD

Participants: 55 patients (43 female; 12 male, mean age=40 years; 90% **Caucasian**) who had been diagnosed with MDD

Procedure:

- Participants were given a **questionnaire** designed specifically to measure the extent of their EMS (a total of 16 EMS were identified on the questionnaire)
- The EMS which featured on the questionnaire included:
  - **Emotional deprivation** - 'For the most part, people have not been there to meet my emotional needs'
  - **Failure to achieve** - 'Most other people are more capable than I am in areas of work and achievement'
  - **Vulnerability to harm** - 'I can't seem to escape the feeling that something bad is about to happen'
  - **Subjugation** - 'I feel that I have no choice but to give in to other peoples' wishes, or else they will retaliate or reject me in some way'
- The severity of depression at **baseline** was measured and there was a follow-up questionnaire 2.5 to 5 years later

Results: Correlations between EMS at the baseline measurement and the 2.5–5 year follow-up were high, with a median of 0.75 which shows that MDD had not improved for participants who registered high on the EMS **scale**

Conclusion:

- EMS appear to be stable (i.e. they are consistent in nature and resistant to change or improvement) and long-lasting
- EMS play a key role in MDD into adulthood

Evaluation of Riso et al. (2006)

Strengths:

- These findings may help to inform **treatment** for patients with MDD i.e. by identifying EMS at an early stage affords the opportunity to apply **remedial interventions** such as **CBT**
- Using baseline and then follow-up measurements helps to increase the **validity** of the findings as the two measurements can be compared to identify EMS across time

Weaknesses:

- The participants in this study were MDD patients so the stability of EMS in other **mental disorders** may be different
- There are potential **ethical issues** to consider when conducting research with MDD patients: great care must be taken to **protect the participants from harm** so as not to contribute to the severity of their MDD

Sociocultural Explanations of Major Depressive Disorder (MDD)

The Behavioural explanation of MDD

- The **Behavioura**l explanation of behaviour encompasses **Social Cognitive Theory** which is a Year 1 topic examined on Paper 1 of the exam
- **Behaviourism** focuses on the idea that behaviour is learned via **conditioning** - **classical conditioning** (**learning via association**) or **operant conditioning** (**learning via consequences**)
- Behaviourism assumes that all behaviours are a response to **environmental stimuli**
- The Behavioural explanation of MDD uses the mechanisms of operant conditioning to explain the development and the mechanisms of MDD
- Operant conditioning works along the principles of **reinforcement**; it plays a key role in **learned behaviour**
- **Positive reinforcement** involves the desire to **repeat** pleasurable experiences as the consequences are positive e.g. '*I received lots of compliments when I wore that dress; I'll wear it again soon*'
- **Negative reinforcement** involves the desire to **avoid** aversive experiences as the consequences are negative e.g. '*My husband told me I looked ridiculous in that dress; I won't wear it again*'
- **Punishment** involves an action being taken against someone who has transgressed in some way e.g. being given a warning at work for being absent too many days (**direct punishment**) or not being invited to an after-work drinks party (**withholding reward**)
- If people lose sources of positive reinforcement (experiences which make them feel **rewarded**) which they may derive from normal, everyday activities e.g. going to college or work, socialising, then they could become depressed
- A lack of **positive feedback** may lead to depression which can reduce productivity, performance and **motivation** which in turn leads to further depression and so depression becomes a **self-fulfilling prophecy**

Evaluation of the Behavioural explanation of MDD

Strengths

- Behaviourism is based on the idea that only **observable** behaviours can be measured which lends itself well to **experimental research** such as **lab experiments** which use high levels of control and are high in **reliability**
- Behaviourist explanations of MDD include a raft of **learning theories** such as **learned helplessness** which have good application to real life situations in which people lose the ability to act in an **autonomous** way thus they have some **external validity**

Weaknesses

- Due to the fact that Behaviourism is based on the idea that only observable behaviours can be measured the role of **cognitions** in behaviour is largely ignored and unaccounted for which limits the **explanatory power** of the theory
- A behavioural explanation of MDD cannot account for behaviours which though unpleasant (e.g. seeking out the company of people who are bad for a person's **self-esteem**) are nonetheless repeated

The Cultural Explanation of MDD

- The **Cultural** explanation of MDD encompasses the role of **cultural norms** in explaining and understanding mental illness generally and **depression** in particular
- MDD is not suffered in isolation: it becomes part of an individual's life, influencing and being influenced by the **social contexts** in which someone operates and functions
- Culture exerts a strong influence on behaviour and this extends to **attitudes** towards mental illness e.g. some cultures embrace the idea that mental disorders are an integral part of human experience whereas other cultures may be suspicious or even unaware of the concept of mental illness and may instead express and **frame** mental disorders in different ways (see **Culture Bound Syndromes** from a previous revision note)
- **Cultural contexts** can influence the understanding and interpretation of MDD symptoms: some cultures may not have the requisite **language** to discuss the feelings associated with depression; some cultures may not have a tradition of talking openly about feelings
- Japanese culture has for some time found the idea of mental illness unacceptable, with attendant feelings of **shame** being experienced as a result of developing MDD (it was not until the 1990s that MDD was a recognised medical disorder in Japan)

- The situation in Japan is improving with MDD (termed a 'cold of the soul') now being recognised and treated as a **legitimate** illness
- **Ethnomedicine** is a relatively new approach to understanding and explaining mental illness which could serve to enlighten the ways in which mental illness is viewed across cultures
- The **ethnomedical approach** suggests that MDD may be a result of living in an **individualistic culture** in which the self is prioritised over the group
- **Collectivistic cultures** do not place much importance on **personal gratification** which means that people from such cultures are less likely to feel frustrated about their failure to achieve personal success and as a result this lack of focus on the self can lead to a decrease in MDD

Evaluation of the Cultural Explanation of MDD

Strengths

- Awareness of cultural differences in explaining and understanding mental illness is vital in a world in which **globalisation** is ever-expanding
- The ethnomedical model highlights the idea that **individualism** may not serve the individual in their pursuit of happiness which goes some way towards re-addressing a **perceived imbalance** between 'successful' Westernised industrial cultures and 'third world' collectivist cultures

Weaknesses

- A discussion of cultural differences in explaining and understanding MDD risks perpetuating **stereotypes** (e.g. the Japanese have no sympathy for depressed people) which can be **reductive** and which ultimately defeats the purpose of trying to embrace all cultural viewpoints
- As culture is such a hugely varied, complex amalgamation of attitudes, behaviours, beliefs, traditions etc. it is difficult to **conceptualise** it
- Without succumbing to **generalisations** e.g. not every member of individualistic societies are self-focused; not every member of collectivist societies are group-focused

Two Key Studies of Sociocultural Explanations of Major Depressive Disorder (MDD)

Lewinsohn et al. (1990)

Key study one (the Behavioural explanation): Lewinsohn et al. (1990)

Aim: To compare the amount of **positive reinforcement** received by patients with MDD and non-depressed participants.

Participants: 30 patients with MDD, a disorder other than depression and a **control group** of people who did not have MDD i.e. this was a **quasi experiment**.

Procedure:

- Participants were asked to complete **questionnaires** conducted daily over a 30-day period which required them to give a **self-rating** of **mood** using a **depression adjective checklist** e.g. 'I feel lucky/active/happy/miserable/gloomy/dull today' etc.
- They were also asked to fill in a **'Pleasant activities' schedule** on a daily basis over the same 30-day period, which involved scheduling and participating in positive activities aimed to boost mood and encourage feelings of **wellbeing**
- The pleasant activities schedule included 320 activities such as participating in a sport, engaging in meditation, reading, spending time with a good friend
- Each pleasant activity was rated according to how pleasurable it was per individual and how often they engaged in each activity
- Positive reinforcement was **operationalised** as the **key determinant** of whether the pleasant activities were a) enjoyed and b) repeated (i.e. each pleasant activity was rated twice on a scale of 0–3, one scale for enjoyment and one scale for repetition)

Results: Positive correlations (which were **statistically significant**) were found between rating of mood and number of pleasant activities engaged in i.e. the more pleasant activities a participant was involved in, the higher was their mood rating.

Conclusion: There may be a link between the positive reinforcement derived from pleasant activities and mood (specifically good mood, feeling upbeat and **optimistic**).

Evaluation of Lewinsohn et al. (1990)

Strengths

- The use of **standardised questionnaires,** rating scales and correlational analysis means that the study has some degree of **reliability**
- The **longitudinal design** of the study means that the participants were able to track their mood mapped to pleasant activities in real time which increases the **validity** of the findings

Weaknesses

- The participants may have succumbed to **social desirability bias,** providing responses which cast them in the best light (this can happen on an unconscious level which makes it particularly difficult to factor out)
- The researchers reported that they found significant **individual differences** in the participants' responses which affects the validity of the findings as it leaves unanswered questions as to what it is about pleasant activities specifically that boosts mood

Karasz (2005)

Key study two (the Cultural explanation): Karasz (2005)

Alison Karasz

Aim:

- To investigate why members of **ethnic minority groups** with MDD symptoms are less likely to consult a clinician than members of **Caucasian** middle class groups
- To examine differences in how mental illness is conceptualised between two different **cultural groups** dependent on each group's exposure to the **medical model** of depression

Participants:

- 36 participants who had **immigrated** to the USA from South Asian (SA) countries and 37 European Americans (EA)
- This sample demographic was relevant as prior research has suggested that people from South Asian cultures tend to view MDD symptoms as social/emotional reactions to situations while European Americans are more likely to view MDD as a mental illness/disease which requires treatment from a clinician i.e. the medical model
- The SA group had low levels of **acculturation**: they rarely used English in their daily lives, preferring to communicate in their native language; they tended to socialise only with others of their native culture
- The EA group were more financially secure and had higher levels of academic attainment than the SA group: they were also twice as likely to work in professional occupations outside the home

Procedure:

- The researchers used a model known as the **illness representation model (IRM)** to explore the different ways in which the participants viewed mental illness
- The IRM suggests that there are five dimensions to the identity of the illness, its timeline, its consequences,its causes and how the illness can be controlled as follows:
  - **Identity**: how has the illness and its attendant symptoms been identified/labelled?
  - **Timeline:** how long is the illness likely to last from first symptoms to recovery?
  - **Consequences:** what are the likely impacts of this illness on the person and on others in their life?
  - **Causes:** what specific beliefs are in place to explain the onset and development of the illness?
  - **Control:** how much control does the individual have over the illness?
- The participants were given a short description of a woman suffering from MDD-like symptoms: they were then asked to use the five IRM criteria to explain the woman's symptoms, likely cause(s), how long the MDD might last, how she might seek to manage it etc.
- **Semi-structured interviews** were conducted to gather the data outlined in the above bullet point

Results:

- One very noticeable difference between the groups was that the EA group provided much longer responses than the SA group: the EAs tended to offer **multiple interpretations** of the scenario whereas the SAs tended to offer one fairly simple explanation of the woman's illness
- The identification of mental illness differed between the groups: the SAs saw MDD as a social and moral issue rather than as a distinct illness whereas the EAs viewed MDD as a clear medical disorder/illness
- The SA group suggested that MDD should be treated by self-management techniques i.e. exerting control over mood/behaviour rather than seeking medical consultation
- The EA group came up with an array of possible explanations for the woman's MDD symptoms including **hormonal**, **neurological**, **situational stress-related**

Conclusion:

- The researchers suggest that concepts, attitudes and behaviours surrounding mental illness provides a 'mirror reflecting cultural realities' (p.1635)
- The interviews with each cultural group highlighted the differences in the ways that each group explains mental illness generally, and MDD in particular
- The findings of the study indicate that SA cultures do not view MDD symptoms as evidence of disease/illness rather they are practical (but very real and potentially very damaging) problems which need to be solved either by the individual or by the community; this in turn explains their reluctance to seek medical treatment for MDD
- The biomedical model is limited in its attempts to explain MDD from a cultural perspective as it is only a Western view of disease

Evaluation of Karasz (2005)

Strengths

- The use of semi-structured interviews allowed the participants to speak freely about the topic which increases the validity of the findings due to the insightful **qualitative data**
- The use of IRM provided the researcher with a standardised framework from which to guide the interview which adds a measure of **control** to the procedure which increases **reliability**

Weaknesses

- The attitudes of immigrants may be different to those of South Asians who have remained in their native countries so the results have limited **generalisability**
- It is possible that the researcher succumbed to an **ethnocentric bias** i.e. their own cultural background may have influenced the ways in which they reported their findings

Worked Example

The question is, *'To what extent is the sociocultural approach a valid explanation of disorders?'*

This question is asking you to consider how successfully the sociocultural approach can explain how MDD develops and is conceptualised. Here is a paragraph for guidance:

The standardised procedure and quantitative data used in Lewinsohn et al.'s (1990) quasi experiment mean that it is to some extent replicable and reliable. However, the fact that the independent variable was based on naturally-occurring phenomena (the sample was 30 participants who had been diagnosed with depression, a disorder other than depression and a 'normal' control group) means that the researchers cannot impose as much control as they would in a 'true' lab experiment in which participants are randomly allocated to conditions. This means that the study lacks some internal validity as the quasi nature of the experiment means that the researchers cannot be sure that pleasant activities and mood are significantly positively correlated.

Summary Table: Key Studies of Explanations for Major Depressive Disorder (MDD)

Key Studies Summary of Explanations for MDD

SUMMARY TABLE: KEY STUDIES OF EXPLANATIONS FOR MAJOR DEPRESSIVE DISORDER	
Topic	**Two Key Studies**
Biological Explanations of MDD ▪ Use both of these studies to answer a question on biological explanations of MDD ▪ McGuffin et al. (1996) can also be used to answer a Paper 1 question on Genetic Similarity ▪ Caspi et al. (2003)n can also be used to answer a Paper 1 question on Genes & Behaviour (the 5-HTT gene) and Neurotransmitters (the effect of serotonin on behaviour)	McGuffin et al. (1996) Caspi et al. (2003)
Cognitive Explanations of MDD ▪ Use both of these studies to answer a question on cognitive explanations of MDD ▪ Riso et al. (1996) can also be used to answer a Paper 1 question on Schema Theory	Beck et al. (1974) Riso et al. (2006)
Sociocultural Explanations of MDD ▪ Use both of these studies to answer a question on sociocultural explanations of MDD ▪ Karasz (2005) can also be used to answer a Paper 1 question on Acculturation	Lewinsohn et al. (1990) Karasz (2005)

How do I use these studies in an exam question on this topic?

- IB students have a *lot* of content to cover (particularly students taking Psychology at Higher Level) so the purpose of this revision resource is to slim down and streamline the number of studies you need per topic/exam question
- Remember that all Paper 2 questions are ERQs (Extended Response Questions) which are worth 22 marks, take an hour to write and need to be rich in critical thinking

- The exam question command term will be one of the following:'Evaluate', 'Discuss', 'Contrast' or 'To what extent'
- Each command term requires you to answer the question in slightly different ways, using the content as shown in the summary table above i.e. specific studies per topic/question
- In order to slim down the content you need to revise you can see above how some of the studies can be used for more than one potential exam question
- McGuffin et al. (1996), Caspi et al. (2003) and Riso et al. (2006) can be used to answer more than one potential exam question so you may decide to keep all of these studies and 'throw away' any studies which you find that you don't need to revise

What are the Characteristics of Phobias?

Types of phobias

- **Phobias** fall under the category of **anxiety disorders**
- A phobia is a fear (often **irrational**) of specific objects/organisms (e.g. **ophidiophobia,** fear of snakes), situations (e.g. **aerophobia**, fear of flying) or concepts (e.g. **athazagoraphobia**, fear of being forgotten) which trigger extreme **anxiety** in the phobic person
- The **DSM-5** classifies phobias into **five categories** as follows:
- **Specific animal phobias** which include:
  - **arachnophobia** (fear of spiders)
- Specific **natural environment** phobias which include:
  - **astraphobia** (fear of thunder and lightning)
- Specific **blood-injection-injury** phobias which include:
  - **trypanophobia** (fear of injections)
- Specific **situational** phobias which include:
  - **claustrophobia** (fear of enclosed spaces)
- Other phobias which do not fit into the above categories which include:
  - **ecclesiophobia** (fear of churches)
  - **coulrophobia** (fear of clowns)
  - **ligyrophobia** (fear of loud noises)
- Living with a phobia can be extremely difficult for the phobic person (and their friends and family) as it has a **debilitating** effect on the person's ability to live a fulfilling and happy life (particularly if the phobia focuses on events or objects that are encountered on a daily basis e.g. fear of water; fear of other people)

The Behavioural Characteristics of Phobias

- **Behavioural** characteristics of phobias involve the behavioural responses (obviously) which describe the phobic person's response to the **phobic stimulus** e.g. what the person does, how they behave when confronted with the phobic stimulus
- One of the most commonly experienced behavioural responses to a phobic stimulus is **panic,** a response which sends the phobic person into a state of high **stress** and anxiety
- Panic involves the phobic person responding in the following ways:
  - 'Freezing' on the spot
  - Crying, screaming or shrieking
  - Running away
  - Passing out/fainting
- Another commonly experienced behavioural response to a phobic stimulus is **avoidance**
- Avoidance involves the phobic person responding in the following ways:
  - Going out of their way to avoid the phobic stimulus (e.g. by never booking a holiday which involves a flight)
  - Taking steps to ensure that they are not going to be confronted by the phobic stimulus (e.g. by refusing all invitations to social events)
  - By informing other people of their phobia so that any visitors to their home or colleagues at work are aware not to introduce the phobic stimulus into the setting or into the conversation (e.g. friends and colleagues are asked not to talk about illness in the presence of the phobic person)

The Cognitive Characteristics of Phobias

- **Cognitive** characteristics of phobias involve the **irrational thinking, cognitive distortions** and **selective attention** i.e. how the person thinks about the phobic stimulus; the ways in which they **process information** surrounding the phobic stimulus
- Irrational thinking and cognitive distortions surrounding the phobic stimulus might involve the phobic person believing the following:
  - *'If I touch cotton wool it might get into my bloodstream and cause a heart-attack'*
  - *'What if I talk to a new person at a party and they laugh at me and tell everyone that I'm stupid?'*
  - *'If I use this escalator I could get my clothes caught up in the machinery and I will be horribly injured'*
- Selective attention involves the phobic person becoming **fixated** on the phobic stimulus and unable to draw their attention away from it
- Selective attention surrounding the phobic stimulus might involve the phobic person behaving in the following ways:
  - Staring at someone's shirt buttons at a party due to the fear that the buttons will choke someone
  - Not being able to keep up a conversation with a friend in a cafe because a man with a beard is sitting at the next table
  - Intently watching a cat sitting on the garden fence in case it tries to enter the house via an open window

The Emotional Characteristics of Phobias

- The primary **emotion** experienced in the presence of a phobic stimulus is anxiety
- A phobic response is an extreme emotional response which is usually out of proportion to the threat posed by the phobic stimulus e.g. **xanthophobia** is the fear of the colour yellow (it is difficult to think of many situations - if any at all - where the colour yellow poses a threat to life)
- Although some phobias (see the above example) may seem irrational or even silly to others, they are very real to the phobic person, resulting in exhausting emotional output for them, sometimes on a daily basis
- The phobic person generally knows that their response is disproportionate to the phobic stimulus but they still feel fear when confronted with it

A Biological Explanation of Phobias

What is Biological Preparedness?

- **Biological Preparedness (BP),** proposed by **Seligman (1971)** is an **evolutionary explanation** of how phobias are formed
- BP explains phobias as being the result of **adaptations** designed to promote **survival** and **fitness**in humans
- BP assumes that people who have a **genetic predisposition** to fear **aversive, toxic** or otherwise **harmful stimuli** are better prepared to survive than those who do not i.e. they give themselves a better chance of avoiding illness or death by avoiding the aversive stimuli
- Seligman suggested that a biological preparedness can give a human being an **evolutionary advantage** over others which translates as more opportunities to **procreate** and hence continue this genetic predisposition via **natural selection**

Biological Preparedness as an explanation for phobias

- Phobias tend to be regarded in popular culture as wholly **irrational fears** based on **cognitive distortions**
- There are some phobias, however, that (on the face of it) are not irrational but are instead rooted in real and potential danger to human **health** and **mortality**
- A fear of buttons may seem irrational but fear of snakes, spiders, heights and darkness can be explained via the potential dangers that these stimuli have or had in human evolutionary history, for example:
  - Snakes can be deadly, as can spiders
  - Falling from a height can harm of kill a human being
  - Darkness brings with it hidden dangers e.g. **predators**
- 21st century human beings should not really fear heights or darkness as there are easy ways of avoiding both of these **phobic stimuli** (safety barriers on high buildings or cliffs; lights, lamps and torches to illuminate the darkness) and, depending on where someone lives, most spiders and snakes are harmless
- The fact that a huge number of people *do* fear snakes, spiders, heights and the dark may be explained using BP as the determining factor i.e. that they have **inherited** a predisposition to fear potentially harmful creatures or situations
- Fear and **avoidance** of snakes, darkness, heights etc. would have proved very useful to **primaeval** peoples: the fear of these stimuli may have meant the difference between life and death

Evaluation of Biological Preparedness as an explanation of phobias

Strengths

- BP provides a **valid** explanation for why some phobias develop i.e. the link to evolutionary theory with its emphasis on survival of the fittest
- Seligman's theory has given rise to raft of supporting research and **hypotheses** which investigate a **biological basis** for phobias (McNally & Reiss, 1982)

Weaknesses

- BP does not explain how phobias for non-threatening stimuli e.g. dolls, cotton wool, buttons develop so it has limited **generalisability**
- BP has its basis in evolutionary psychology so it cannot explain the existence of phobias which centre on **modern technology** e.g. **cyberphobia** (an extreme fear of technology); **nomophobia** (fear of being without a mobile phone)

Which studies investigate a biological explanation of phobias?

- **Ohman et al. (1975) –** phobia of snakes may be evidence of Biological Preparedness
- **Ahs et al. (2018) –** Biological Preparedness does not explain the origin of specific phobias

Two Key Studies of a Biological Explanation of Phobias

Key study one: Ohman et al. (1975)

Aim:

- To investigate **Biological Preparedness** linked to snake phobia **(ophidiophobia)**
- To investigate whether snake phobia be more easily **conditioned** than phobia for **stimuli** which pose no immediate threat e.g. houses, faces

Participants:

- 64 participants (38 female; 26 male, aged 20–30 years) from the University of Uppsala in Sweden
- All of the participants were Psychology students who comprised a **self-selecting sample**
- The participants were paid to take part in the **experiment**

Procedure:

- Each participant was wired up to a machine that measured **skin conductance**
- The participants were given a trial **electric shock** to determine the level which they found uncomfortable but not painful
- Participants were told that they would be viewing a series of images and that after some of the images they would receive a shock
- There were three **conditions** of the **independent variable**:
  - Half of the participants received shocks after viewing images of snakes
  - A quarter of the participants received shocks after viewing images of houses
  - A quarter of the participants received shocks after viewing images of faces
- Each image was shown for 8 seconds

Results:

- Participants in the 'snakes' condition responded with 0.062 skin conductance but only 0.048 when they viewed the houses or the faces (after which they were not given a shock)
- Participants in the 'snakes' condition sweated more than participants in the other two conditions which is evidence of an increased **physiological response** (e.g. fear)
- Participants in the 'houses' and 'faces' conditions showed a lower skin conductance rate of 0.037

Conclusion:

- Viewing images of snakes in the presence of an electric shock may increase the **fear response** to snakes in general
- The results support Biological Preparedness as an explanation for phobias i.e. that humans may have **evolved** a mechanism to avoid dangerous stimuli such as snakes
- Participants should have shown similar levels of fear to all the stimuli as they were all paired with the shocks: the fact that, over time, the 'snakes' condition still showed higher fear than the others suggests there is an underlying biological/evolutionary cause

Evaluation of Ohman et al. (1975)

Strengths

- This was a well-designed lab experiment using distinct, **operationalised variables** within a **standardised procedure** which means that it is **replicable** and can thus be checked for **reliability**
- The use of the **biological measure** of skin conductance is almost impossible to fake which reduces the possibility of **demand characteristics** influencing the findings

Weaknesses

- There are some issues with the **ethical validity** of this study: showing fear-inducing images and issuing electric shocks to participants brings with it real concerns for the participants' psychological and physical wellbeing
- The researchers **inferred** that the higher skin conductance in the 'snakes' condition was due to viewing the snakes in the presence of a shock but the results could be due to **other factors** e.g. nervousness, **anxiety** about the procedure, rather than a fear of snakes

Key study two: Ahs et al. (2018)

Aim: To investigate Biological Preparedness as a valid explanation of phobias.

Procedure:

- The researchers conducted a **review** of existing **literature** (published, **peer reviewed** research) which had investigated **fear-conditioning** experiments
- A total of 23 studies were used in the review which included 32 experiments, giving a combined total sample size of 1887 participants
- The studies in the review had been published between 1975 and 2018
- Each study in the review had used procedures which aimed to **decondition** fear of spiders (**arachnophobia**) and fear of snakes which involved showing participants a series of images designed to lead to **extinction** of the conditioned phobia
- If the participants showed **resistance** to deconditioning of their snake/spider phobia then this would act as evidence that such phobias are **innate** and are a result of Biological Preparedness

Results:

- 22 of the 32 studies in the review reported that participants with snake/spider phobia had been successfully deconditioned i.e. their phobia had disappeared
- Only 10 of the 31 studies reported an increased resistance to snake/spider phobia extinction

Conclusion:

- Biological Preparedness may not be a 100% valid theory to explain phobias
- Biological Preparedness cannot successfully explain the origin of specific phobias

Evaluation of Ahs et al. (2018)

Strengths

- A review of the literature on a specific topic allows researchers to access a high number of studies incorporating much data and a large total sample size which increases the reliability of the findings
- The researchers who conducted this study are unlikely to have succumbed to **researcher bias** in their analysis of the studies reviewed as they used other people's work over which they had no influence

Weaknesses

- The researchers had no way of knowing how the original studies in the review had been conducted which could be an issue in terms of **consistency** and reliability
- The researchers may have succumbed to **selection bias** in choosing research for the review which would decrease the **validity** of their conclusions

Worked Example

The question is, '*Discuss a biological explanation of phobias' [22]*

This question is asking you to offer a considered and balanced review of a biological explanation of phobias that includes a range of arguments, factors or hypotheses. Alternative explanations may be used as part of the evaluation. Here is a paragraph of critical thinking for guidance:

An evolutionary psychologist would explain fear of snakes, heights, fire as evidence of Biological Preparedness i.e. that such phobias give people an evolutionary advantage as they alert them to possible dangers in their environment. This explanation does make sense to some extent: snakes, heights and fire are all potentially lethal to human beings and avoidance of them would provide the phobic person with fewer opportunities in which to come to harm. There are, however, people who have phobias for non-threatening, even mundane stimuli such as buttons, clouds, mayonnaise: how can these phobias be explained using evolutionary psychology? Biological Preparedness cannot really provide a satisfying or convincing argument to explain phobias for relatively harmless stimuli. Unusual phobias can probably be best explained using the Behaviourist explanation which assumes that phobias are learnt rather than innate i.e. the product of environmental conditioning rather than biology.

Generalised Anxiety Disorder: A Cognitive Explanation of Phobias

What is Generalised Anxiety Disorder?

- A **cognitive** explanation of **phobias** involves considering how **irrational thought processes** and **cognitive distortions** shape the responses of the phobic person to the **phobic stimulus**
- **Generalised Anxiety Disorder (GAD)** may involve the following behaviours (according to the **DSM-5**):
  - **Excessive anxiety** and **worry** (known as **apprehensive expectation**) which has been present for for at least six months
  - This anxiety may be focused on a range of events or activities in the sufferer's life e.g. attending school, a work project, taking an exam
  - The sufferer finds it difficult to control the anxiety
  - **Restlessness**, feeling 'on edge'
  - **Fatigue** i.e. 'tired all the time' syndrome
  - **Irritability**
  - Inability to **concentrate**
  - **Sleeplessness**
- The anxiety causes great distress to the sufferer and interferes with their daily functioning e.g. absence from work, reduced social contact, reduction in once-pleasurable activities
- The 'generalised' aspect of GAD refers to the fact that there is no single specific cause or reason for the anxiety; the sufferer's anxiety is focused on a range of different issues for different reasons
- Some celebrities who have GAD include **Prince Harry, Kendall Jenner, Selina Gomez, Kim Kardashian, Ariana Grande** and **Jonah Hill**

Generalised Anxiety Disorder as an explanation of phobias

- GAD shares some key features in common with the descriptions of phobias e.g. **excessive fear** of **heart attacks**, of becoming ill, of being **rejected** by others
- GAD can produce **panic** in sufferers which is also associated with a phobic response to **adverse stimulus**
- Excessive and uncontrollable worry surrounding the phobic stimulus e.g. '*If I leave the house I might get hit by a car*' is a central element of GAD: this may give rise to **comorbidity** i.e. someone who suffers from both GAD and a specific phobia
- Worry and anxiety are not unusual behaviours and may actually be necessary (they direct attention to what is important and what requires action); it is when the worry grows out of proportion to the implied or imagined threat that it may be diagnosed as an **anxiety disorder** such as a phobia

Evaluation of Generalised Anxiety Disorder as an explanation of phobias

Strengths

- The clear crossover between GAD and phobias means that the phobic person's **symptoms** should register as evidence of an anxiety disorder with their **clinician** rather than being dismissed as '**hysteria**' (which is how some disorders were negatively labelled in the past)
- There are well-established **treatments** for anxiety disorders e.g. **CBT** which are led by trained **therapists** who are able to guide the sufferer away from their irrational thoughts and towards more positive thought processes

Weaknesses

- The fact that GAD and phobias share similar features makes it difficult to distinguish between the two (e.g. does the patient have GAD or a specific phobia?) which means that targeted treatment for phobias (e.g. **systematic desensitisation**) may not be **prescribed** by the clinician
- GAD does not get to the heart of what phobias are, how they function and why phobias affect some people and not others so it cannot offer a very comprehensive account of this type of anxiety disorder

Which studies investigate a cognitive explanation of phobias?

- **DiNardo (1998) –** linked excessive worry to anxiety as an explanation of phobias
- **Barrera & Norton (2009) –** quality of life is negatively impacted by GAD, social phobia and panic disorder

Two Key Studies of a Cognitive Explanation of Phobias

Key study one: DiNardo (1998)

Aim: To investigate 'excessive worry' as a feature of **Generalised Anxiety Disorder** (**GAD**) and its relevance to phobias.

Participants:

- Patients who had been **diagnosed** with GAD and a **control group** of non-GAD patients (the original article does not state the number of participants involved in the research)
- The patients attended one of three **clinics** located in the USA

Procedure:

- This was a **quasi experiment** (i.e. patients either had or did not have GAD) with an **independent measures** design (i.e. each patient received one **score** per **condition**)
- The patients were interviewed using either the **Anxiety Disorders Interview Schedule** or the **Structured Clinical Interview**
- Each patient was interviewed twice, using the same questions, using the **test-retest method**
- The patients responded to the questions using a **five-point rating scale** which covered **symptoms** such as:
- **Physiological** responses to anxiety such as sweating
- **Sleeplessness**
- **Excessive worry**
- Excessive worry was measured in terms of how **frequently** the patients engaged in it on a daily basis, giving **percentages** to account for how much of each day was spent worrying (regardless of what the object of the worrying was)

Results:

- There was a **significant difference** in the percentage of worrying reported by the GAD patients than the non-GAD patients: 59.1% in the GAD patients compared to 41.7% of the non-GAD patients
- The non-GAD patients tended to report low levels of worry, in fact some of them reported that they did not worry at all (i.e. they spent 0% of the day worrying)

Conclusion:

- Excessive worry appears to be a key feature of GAD
- Excessive worry brings with it **irrational thinking** and **cognitive distortions**, both of which are symptomatic of phobias as well

Evaluation of DiNardo (1998)

Strengths

- The use of **standardised** rating scales and the test-retest method means that the study has good **reliability**
- The use of a control group means that results could be compared between groups to check for signs of GAD in the **experimental group** which increases the **validity** of the findings

Weaknesses

- The link between excessive worry, GAD and phobias is tenuous and does not really provide a conclusive answer to how the cognitive approach explains phobias
- The GAD patients may have given **unreliable** responses to the questions as a direct result of suffering from an anxiety disorder i.e. their 'excessive worry' could have led to them giving responses which were confused, untrue or which were based on a wish to please the researcher by doing the 'right thing'

Key study two: Barrera & Norton (2009)

Aim: To investigate the quality of life as reported by patients suffering from GAD, a **panic disorder** and **social phobia**.

Participants:

- 67 patients who regularly attended the University of Houston Anxiety Disorder Clinic in the USA
- 17 of the sample had been diagnosed with GAD; 23 of the sample had a diagnosis of panic disorder and 27 of the sample had received a diagnosis of social phobia
- 33% of the sample were **comorbid** with **major depressive disorder** (**MDD**) and 51% of the sample were comorbid with anxiety
- The sampling method used was **opportunity sampling**

Procedure:

- Each patient filled in the **Quality of Life Inventory** (**QOLI**)
- The QOLI measures positive **mental health** and happiness, resulting in an overall score based on (what they term) the "Sweet 16" areas that constitute quality of life, including love, work and play
- The QOLI score indicates a person's **overall satisfaction** with life, based on responses to questions about how well the wishes, needs and goals of the **respondent** are being met.

Results:

- The participants all scored lower on the QOLI than a sample of **non-anxious** adults in the community who had previously been tested
- None of the three disorders appeared to bring less satisfaction than the others as all three showed similar levels of **negative response** i.e. GAD, panic disorder and social phobia appear to impact quality of life equally negatively
- The participants who were comorbid with MDD found that this impacted more negatively on their lives than those who did not also suffer from MDD (this was not true for the patients who were comorbid with anxiety)

Conclusion:

- Having an anxiety disorder negatively affects quality of life
- There does not appear to be one specific anxiety disorder that has a more negative impact than others

Evaluation of Barrera and Norton (2009)

Strengths

- It is unusual and interesting to find a study which takes a cognitive approach to investigate phobias: this makes the findings useful as they can offer a fresh perspective on how to explain phobias (and, ultimately how to **treat** them) and the impact phobias have on the sufferer's life
- The findings indicate that anxiety may be different in its manifestation than MDD as the comorbid patients with depression reported less satisfaction than the comorbid-with-anxiety patients: this **reinforces** the idea that phobias are a distinct type of anxiety disorder which require different treatment to MDD

Weaknesses

- The participants were asked to draw from their thoughts and feelings about quality of life which involves the **operationalising** of **subjective variables** which are open to **interpretation** which reduces the reliability of the findings
- The **disparity** between sample size per disorder means that there is a lack of **uniformity** in the research design which means that the findings lack **generalisability** i.e. the sample is not **representative**

Worked Example

The question is, '*Discuss ethical considerations of research into cognitive explanations of one or more disorders' [22]*

This question is asking you to give a balanced and reasoned argument as to how ethical considerations could be addressed before and/or during and/or after the research process. You should focus on at least two key ethical considerations in your response. Here is an exemplar paragraph for guidance:

Both DiNardo (1998) and Barrera & Norton (2009) would have had to be mindful of the fact that they were investigating a socially sensitive topic (mental illness) and that to do so required obtaining a sample of patients who suffered from a range of anxiety disorders. The participants used in both of these studies should have been protected from harm as per ethical guidelines as they would have entered the research process in an already vulnerable state. To protect the participants the researchers should have ensured that the participants were aware of what the research process involved (this also covers informed consent); they should have given the participants enough time to complete the procedure, offering them rest breaks, checking in with them re: how they were feeling and giving them access to counselling if required.

The Two-Process Model: A Sociocultural Explanation of Phobias

What is the Two-Process Model?

- The **Two-Process Model (TPM)** was suggested by **Mowrer (1960)** and takes as its basis the idea that behaviour is **learned through experience** via **environmental stimuli**
- **Behaviourism** is key to understanding the TPM
- The key **assumptions** and **mechanisms** of Behavourism are:
  - Only **observable behaviour** can be **measured**
  - A human being is born as a **'blank slate' (tabula rasa)** which life writes **on** via experience and learning
  - Behaviour can be **conditioned** via **classical conditioning** and **operant conditioning**
  - Classical conditioning involves the transformation of a **neutral stimulus** into a **conditioned stimulus** e.g. the bell rung by **Pavlov** which produced salivation in dogs
  - Classical conditioning is learning by **association** e.g. the association of the bell with food (which is the **unconditioned stimulus** as dogs - and people - do not have to learn to want to eat food)
  - Operant conditioning involves the role of **reinforcement** in behaviour e.g. the rats in **Skinner's experiments** learnt to tap a lever in order to be **rewarded** with food (**positive reinforcement**) or to tap a lever in order to **avoid** an electric shock (**negative reinforcement**)
  - Operant conditioning is learning via consequences
- The TPM states that behaviours (such as **phobias**) are originally learned via the mechanisms of classical conditioning and are then maintained via the mechanisms of operant conditioning

The Two-Process Model as an explanation of phobias

- Classical conditioning is the starting point of the origin of a phobia according to the TPM
- An example of how classical conditioning may be responsible for the onset of a phobia is as follows:
  - Ivan has no real feelings towards cats: he neither likes nor dislikes them so in this case cats are the neutral stimulus (NS)
  - Ivan has an aunt he visits every Tuesday and his aunt owns a cat
  - Every time Ivan visits his aunt her cat scratches him (this is the unconditioned stimulus) which Ivan finds frightening and unpleasant (this is the **unconditioned response)**
  - After a few months Ivan finds that all cats now induce **fear** in him, whether the cat is real or on television or even depicted as a cartoon, thus all cats are now the conditioned stimulus and Ivan's fear of them is the **conditioned response**
  - Ivan's fear of one specific cat has now **generalised** to all cats i.e. he has a cat phobia (**ailurophobia**)
- An example of how operant conditioning may be responsible for the maintenance of a phobia is as follows:
  - Ivan goes out of his way to **avoid** cats: he stops visiting his aunt; he turns the television off if a cat appears; he walks a different way to work so that he won't pass a house in which a ginger cat sits in the window
  - Ivan's avoidance of cats is an example of negative reinforcement as Ivan is taking steps to keep away from the phobic stimulus
  - Ivan's avoidance of cats brings with it feelings of relief (his reward) which is an example of positive reinforcement thus he will repeat the behaviours that bring this reward thus he will keep avoiding cats and his phobia will persist

Evaluation of the Two-Process Model explanation of phobias

Strengths

- The TPM (and the Behaviourist approach generally) offers the most convincing explanation of how phobias develop and are maintained which gives it good **validity**
- The model sets out the mechanisms via which phobias are conditioned which has resulted in the development of **therapies** such as **systematic desensitisation** which work to reverse this process by to successfully **treat** phobias

Weaknesses

- The TPM only focuses on conditioning as a determinant of phobia development which does not account for phobias which may have an **evolutionary** origin (see the **Biological Preparedness** section of this revision resource)
- The TPM cannot explain why some people may have continuous aversive experiences and yet not develop a phobia e.g. people who were physically punished at school do not all develop school phobia (**scolionophobia**)

Which studies investigate a sociocultural explanation of phobias?

- **Watson & Rayner (1920) –** the conditioning of a phobia via classical conditioning

Two Key Studies of Sociocultural Explanations of Phobias

Key study one: Watson & Rayner (1920)

Aim:

- To induce a **specific phobia** in a child via the mechanisms of **classical conditioning**
- To investigate the extent to which the specific phobia could be **generalised** to similar **phobic stimuli**

Participant:

- An 8-month-old child who was the son of a nurse that worked in the campus hospital of John Hopkins University where John Watson worked as a professor (Rosalie Rayner was his graduate student)
- Albert appeared to be a contented, **unemotional** child (according to Watson prior to the research process) who showed little fear generally and no specific fear of rats
- Watson **tested** Albert's reactions to loud, unpleasant noises before the research officially began by hitting a **steel bar** with a hammer in Albert's presence (to which Albert, unsurprisingly, reacted to with fear and distress)
- The **baseline** for Albert's **fear response** was thus established prior to the onset of the procedure: the **unconditioned stimulus** was the loud, unpleasant noise and Albert's distress/fear was the **unconditioned response**

Procedure:

- The procedure (which began when Albert was 11 months old) involved the use of **controlled conditions** in a **lab setting** and was conducted as follows:

1. A **white rat** was introduced into the **experimental space** and when Albert reached out to touch it the steel bar was struck behind his head, making a loud, jarring noise
2. Albert fell forward but did not cry; the next time he reached out for the rat the bar was struck again; Albert whimpered but did not cry
3. A week later the same procedure was carried out and **repeated** several times until Albert started to show more signs of fear
4. The next few times the rat was presented to Albert he cried and tried to crawl away
5. The next week, when the rat was presented to him, Albert whimpered and turned away; he also did this when a **rabbit** was introduced into the space
6. Varying degrees of fear and **aversion** were shown by Albert when the researchers brought a dog, a seal-skin coat, human hair and a Santa Claus mask into the space

7. Five days later, Albert was showing signs that his fear of the rat was **abating** so the researchers hit the steel bar again which then produced the same fear response
8. The testing of the fear response (hitting the bar behind Albert's head) was repeated on and off over the next five days

Results: The results are as outlined in the above procedure: Albert's continued fear response to the phobic stimuli.

Conclusion:

- It is possible to turn a neutral stimulus (e.g. a rat) into a conditioned stimulus (e.g. rat plus steel bar) which produces a conditioned response (e.g. fear) via the process of classical conditioning
- A specific conditioned phobic response (the rat) can become generalised to include phobia of fur-covered creatures or objects in general

Evaluation: Watson and Rayner (1920)

Strengths

- The use of **controlled conditions** and a **standardised procedure** within a lab setting mean that this study could be **replicated** to test for **reliability**
- The study provides insight into how a specific phobia may become generalised to include a range of phobic stimuli which could be useful information for **deconditioning** a phobia

Weaknesses

- The (horrendous) treatment of Albert means that this study could never be replicated e.g. the **harm** inflicted on Albert (which was not undone via deconditioning); no **right to withdraw**; no **anonymity** (Albert became one of the most famous - or infamous - people in the history of psychological research)
- The use of only one participant means that this case study cannot be generalised beyond its lone subject

Key study two: DiNardo et al. (1988)

Aim: To investigate whether phobia of dogs (**cynophobia**) was **maintained** via the **mechanisms** of **operant conditioning**.

Participants:

- 14 participants who had a phobia of dogs and a **control group** of 21 participants with no dog phobia
- The participants were students at the State University of New York, USA

Procedure:

- The researchers conducted **structured interviews** with participants to establish the following:
  - If the participants had experienced any frightening events or situations involving a dog
  - If the participants had ever been bitten by a dog
  - If the participants had been bitten by a dog, was the bite **painful**?
  - If the participants had been bitten by a dog, was the experience **frightening**?
  - What were the participants' feelings about the possible **consequences** of encountering a dog at any given time in the future?

Results:

- 56% of the dog-phobic participants and 66% of the non-phobic participants reported having experienced at least one frightening event/situation involving a dog
- More than 50% of the dog-related frightening events included the participant receiving a painful dog bite
- 100% of the dog-phobic participants believed that any future encounter with a dog would result in fear and physical harm (to themselves)
- Very few of the non-phobic participants believed that any future encounter with a dog would result in fear and physical harm (to themselves)
- The dog-phobic participants expressed an **exaggerated fear of physical harm** linked to possible future encounters with a dog

Conclusion:

- An exaggerated fear of physical harm may be a key **factor** in the maintenance of a dog phobia
- This exaggerated fear is likely to result in dog-phobic people **avoiding** future encounters with dogs

Evaluation of DiNardo et al. (1988)

Strengths

- Structured interviews are **replicable** as they use **standardised questions** which means that this procedure could be conducted with other populations affected by phobias e.g. people with **agoraphobia, claustrophobia, social phobia** etc.
- The findings support the TPM as they suggest that it is the anticipation of physical harm that maintain the fear response (which is an example of **negative reinforcement**)

Weaknesses

- 66% of the non-phobic participants reported having experienced at least one frightening event/situation involving a dog yet this did not result in them developing a dog phobia which **refutes** one of the central claims of the TPM
- This study relies purely on the participants providing **accurate recall** of events from the past which cannot be checked for consistency which means that the research may lack **reliability**