

BIOPSYCHOLOGY ESSAY PACK

For AQA and Oxford International AQA A-Levels Psychology Paper 2

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1. 'The great pleasure and feeling in my right brain is more than my left brain can find the words to tell you' (Roger Sperry). With reference to this quote, outline and evaluate split-brain research. (16 marks)

Ans.

Hemispheric lateralisation refers to the dominance of

Lateralisation was classically investigated using split-brain research. In severely epileptic patients,

In a series of studies, Sperry and Gazzaniga presented split-brain patients with

Referring to the quote above, it is clear that in

A strength of split brain research is support from

Methodological flaws in split-brain research have also been reported as weaknesses. One has been [REDACTED]

[REDACTED] Another has been representation of [REDACTED]
[REDACTED] e. Finally, critics have pointed out that in some patients, [REDACTED]

Despite the possibility of confounding and methodological flaws of early research, a strength is reconfirmation of findings by investigating [REDACTED]

Referring to the quote again, it appears that it is [REDACTED]

2. Outline and evaluate research into ultradian and infradian rhythms. (16 marks)

Ans.

Ultradian rhythms are biological cycles shorter than 24 hours. The most prominent is the cycle of sleep stages. In a single night, it repeats itself

[Redacted text block]

Infradian rhythms are biological cycles greater than 24 hours. The most prominent is the menstrual cycle in women. Research shows that

[Redacted text block]

One strength of research into ultradian and infradian rhythms is empirical support for most

[Redacted text block]

One weakness, however, is that findings from research may be overgeneralised as

[Redacted text block]

Finally, such research has the strength of practical application. Research into stages of sleep has led to development of

[REDACTED]

3. Some psychology students raised dysfunctional rats with a 18-hour sleep/wake cycle in a laboratory. When SCN cells from these dysfunctional rats were transplanted into the brains of normal rats, the cycles of the second group reduced from 24 to 18 hours. The students later exposed both groups to natural light/dark cycles to test whether environmental cues could override the transplanted SCN's rhythm. Surprisingly, the normal rats with transplanted SCNs maintained their 18-hour cycles, resisting entrainment to the 24-hour light cues.

Outline and evaluate the effect of endogenous pacemakers and exogenous zeitgebers on the sleep/wake cycle with reference to this experiment. (16 marks)

Ans.

In mammals, the sleep-wake cycle is circadian - it occurs once in every 24-hour period. Its rhythm is maintained by endogenous pacemakers (EPs) or

Exogenous zeitgebers (EZs) or external time-giving cues entrain

Though EPs entrain to EZs, they are quite rigid, given

A strength of the effect of EPs and EZs on sleep-wake cycle is repeated empirical support. Classic research by [REDACTED]

[REDACTED] These findings were replicated in another classic study [REDACTED]

[REDACTED]. Animal studies have also [REDACTED]

However, one weakness of all this research is lack of ecological validity. [REDACTED]

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