# Explanations for insomnia and/or narcolepsy

**Insomnia**
This is the inability to sleep, it can be either be short-term lasting a few nights or chronic and long term. There are two types of insomnia; the first is **primary insomnia** which is chronic but occurring in the absence of any physical cause. **Idiopathic insomnia** is an additional primary type insomnia, which has no clear visible signs of its cause. It is lifelong beginning in early childhood and is theorized as being a result of either an under-active sleep system or overactive awakening system. **Secondary insomnia** has an obvious physical cause, in order to treat this the underlying physical cause, such as depression, must be treated.

The causes of insomnia and AoA/3:
- **Psychological disorders** like anxiety and depression are believed to cause secondary insomnia, it’s been estimated that 40% of individuals with insomnia have previously had a psychological disorder (Morin et al)
- **Physical disorders** also such as asthma and Parkinson’s disease are known to lead to insomnia
- **Genetics** are likely to influence secondary insomnia, Dauvilliers’ study asked 256 insomniacs to fill in a self-report measure about family history of the disorder, 75% reported that previous family members had the disorder whereas only 23% in the control group also reported it, clearly this is not conclusive because the result was not 100% and alternative factors are evidently at work, genetic factors fail to explain how the disorder developed
- **Dement et al** researched insomnia and questioned the whole concept of it, suggesting insomnia was not a disorder but merely a symptom of a range of disorders (could explain why people with depression/anxiety have it)
- **Drugs and stimulants** are likely causes also, alcohol and the overuse of sleeping pills lead to disrupted sleep patterns and so, increases insomnia
- **Personality** Kales et al suggested personality type was a risk factor in the development of insomnia; those more likely to be aggressive cause higher levels of emotional arousal and thus are more at risk of becoming insomniacs. Morin et al tested this, examined the relationship between stress, coping skills and pre-sleep arousal between good sleepers and insomniacs. They were asked to keep track of the variables above, insomniacs rated minor daily hassles higher and had more intense pre-sleep arousal compared to good sleepers, supporting Kales’s personality assumption and how people perceive triggers

**Narcolepsy**
The word itself means “seized by sleepiness.” This sleeping disorder can be described as an attack, an inability to control and maintain wakefulness. It begins in adolescence or early adulthood and may continue through a person’s whole life.

The clue to explaining narcolepsy lies in narcoleptic dogs. Narcolepsy in dogs is caused by a gene defect on chromosome 12 that controls a neurotransmitter called orexin (aka hypocretin). When the gene defect disrupts the production of orexin, narcolepsy occurs.

The assumption that narcolepsy is caused by orexin is reductionist as we do not fully understand how it causes narcolepsy; a link has merely been established. It’s also deterministic to assume that we have no free will over developing narcolepsy, for instance, it’s also widely believed that narcolepsy may be caused by emotional arousal which we can very well control and therapies like CBT can also help

Issues with explaining insomnia:
- **Difficult in generalisation** – there are so many different types of insomnia attributable to so many different causes that it’s impossible for research to have external validity and wider generalisation
- **Reliability and validity** – Research here has been criticised as it’s typically through correlations and interviews in which every researcher will interpret differently, highlights the subjective nature of diagnosis
- **Reductionist** – Trying to explain chronic insomnia to one cause like X means is reductionist as the disorder is very complex and unlikely to be broken down and explained in a simple way.

An explanation for narcolepsy is that it may be linked to a malfunction in the system that regulates REM sleep. People with narcolepsy go straight into REM sleep rather than follow normal sleep pattern. Some symptoms of narcolepsy can be explained by looking at what happens during REM sleep:
- Bodily muscles lose tone, which accounts for cataplexy and sleep paralysis and dreams occur in REM sleep, which accounts for hypnagogic hallucinations. This explains why the symptoms occur but does not explain why the disorder develops in the first place.

- Dement found that mice who could not develop orexin ended up developing symptoms seen in narcolepsy such as cataplexy, thus highlighting the link between orexin and the disorder
- Thannical’s study found levels of orexin to be lower in people with narcolepsy
- Nishino et al found a link to low levels of orexin in narcoleptic people, why this low level of orexin occurs isn’t clear. It can’t be due to genetics (nature) because narcolepsy isn’t commonly found to run in families, so perhaps it’s a result of environmental factors (nurture) like brain injury, infection or stress
- Correlational research

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