Psychological perspectives of sleep and sleep deprivation



Sleep deprivation has the potential to result in a range of problematic behaviour, from which serious adverse effects can result. In order to design a treatment it is critical to initially establish an understanding of what motivates normal and abnormal behaviour. This essay will evaluate the 5 different psychology perspectives to establish which has the best study methods, and their perception on the motivation for sleep and for sleep deprivation. The 5 perspectives are evolutionary, psychodynamic, behaviourist, cognitive and hierarchy of needs. The essay will explore the origins, the research methods, variables, theories and hypotheses, and will a critique of the strengths and shortcomings associated with each of them. An argument will be presented that the behaviourist perspective is the most reliable perspective to study sleep and sleep deprivation. These finding are based on the theories and substantiated research methods applied in the behaviourist perspective.

Basic Perspectives on Motivation: Evaluating Five Accounts for Sleep and Sleep Deprivation

and psychiatric disorders (Wilson). According to McCall (as cited in Wilson, 2005), an association have been made between depression, psychiatric disorders and sleep deprivation.

The rationale for this essay is to evaluate the 5 perspectives named in order to identify what motivates people to sleep or not to sleep. This essay will argue that the behaviourist perspective is the best perspective for determining what motivates people to sleep and the causes sleep deprivation.

Charles Darwin's evolutionary perspective focuses on the study of evolution as a means to explain physiological processes (Burton, Westen, & Kowalski, 2009). Darwin proposed that motivation has a biological basis, this perspective is founded on the theory of natural selection (Burton et al., 2009). Evolving over the ages, the brain is governed by neural circuits which motivate behaviour (Burton et al.).

Sleep is considered essential for the maintenance of physical and mental wellbeing. Sleep is motivated and managed by instinctive decreased neural programming in the brain, evolved over time through the process of natural selection in response to environmental rotation of light and dark hours. Sleep studies would be undertaken through the process of naturalistic observation (Burton et al., 2009). A combination of observation and the use of video recording would be practical method of recording the actual sleep hours. This would be supported by the use of an electroencephalogram (EEG) to record the neural activity before, during, and after sleep (Burton et al.). The biological variable in this study are the hours of sleep and the theoretical

variable the neural activity. It is hypothesised that as the neural activity decreases, sleeping hours increase.

Modern times has seen the introduction of electricity, 24 hours television, computers and other stimuli which have caused an inconsistently between natural sleep behaviour and the abnormal behaviour of sleep deprivation. The constant stimuli have prevented neural activity from decreasing. Natural observation would be used to test this theory (Burton et al. 2009), measuring the biological variable, hours of sleep through video recording and record keeping. The theoretical variable, brain activity would be measured by an EEG before, during, and after sleep, to contrast and measure changes. It is hypothesised that the brain activity will be high during the usual sleep period, resulting in the participate becoming sleep deprived.

Strengths of this study are that it allows for observation of natural behaviour in a natural setting and provides the opportunity to study research which cannot be observed within a laboratory (Burton et al., 2009). Shortcomings of the natural observation method are the failure to find causation, the lack of generalisability and research finding could not be replicated (Burton et al.). As the shortcomings of this method of research are greater that the strengths, this perspective is not recommended as a means to study of sleep and sleep deprivation.

The psychodynamic perspective as theorised by the work of Sigmund Freud, places an emphasis on the role of the unconscious processes, motivation, and early childhood experiences as a way to explain human behaviour (Burton et al., 2009). It describes behaviours as being motivated by drives,

internal tension states, that build up until they are satisfied (Burton et al.). Freud believed that the mind is like an iceberg, with most being hidden. Conscious awareness, the tip of the iceberg, floats above the surface. The preconscious, the area just below the surface, contains information which can be brought to awareness when needed. The unconscious, the part deeply submerged underwater, contains thoughts, feelings, and memories of which a person is unaware. This part would also contain information or memory which had been effectively blocked from consciousness (Burton et al.).

In psychodynamic terms, sleep is expressed as the discharge of the building tension of the need for sleep, as a means of satisfying the drive for self preservation (Burton et al., 2009). A case study method of research would be used to study sleep behaviour (Burton et al.). Hours of sleep, the biological variable, would be recorded by the participant through self-reporting using a sleep diary. Internal tensions, the theoretical variable, would be measured using a thematic apperception test (TAT), which is designed to reveal the participants unconscious tensions. It is hypothesised that as internal tensions increase, as measured by higher TAT scores, a greater number of sleep hours will be recorded in the participants sleep diary.

Sleep deprivation can be explained as a self-deceptive desire to stay awake. Psychological distress and good judgement are compromised through rationalisation and compromise. A case study method of research would be used in this perspective, to study sleep deprivation (Burton et al., 2009). Observation or self reporting would be used to measure hours of sleep. The TAT would be used to discover unseen motives and utilised to test the https://assignbuster.com/psychological-perspectives-of-sleep-and-sleep-deprivation/

internal tension states (Burton et al.). The biological variable in this study are the hours of sleep and the theoretical variable, internal tension states. It is hypothesised that as the internal tension state increases, as measured by the higher TAT scores, the self deceptive desire to stay awake, measured by the participants sleep diary, also increases resulting in sleep deprivation.

Strengths of this study are that through the application of scientific reasoning a relationship between internal tensions, implicit thought processes and sleep deprivation is established (Burton et al., 2009) Shortcomings of this study include the low generalisability and research finding could not be replicated (Burton et al.). The study is susceptible to researcher bias and did not determine causation (Burton et al.). As the shortcomings of this method of research are greater that the strengths, this perspective is not recommended to study sleep and sleep deprivation.

The behavioural perspective, established by John Watson and B. F. Skinner, focuses the belief that behaviours are learned and that environmental events control behaviour (Burton et al., 2009). Drive reduction theory describes an unpleasant state of tension being reduced through behaviour, that behaviour is considered rewarding leading to motivation to repeat the behaviour (Burton et al.). Behaviourists believe in the theory of "Tabula Rasa," or "the blank slate theory" (Burton et al. p. 14). For example, a child is born with no knowledge and they must seek it from both environment and experience (Burton et al.).

Sleep is explained as consciously chosen and considered has having value and being attainable (Burton et al., 2009). Sleep is an innate drive which is

rewarded by the release of built up tension through resting. A behaviourist would test this theory using an experimental study (Burton et al.). The theoretical variable of heart rate would be manipulated and the biological variable of hours of sleep would be measured. The heart rate would be measured by ECG before during, and after sleep to allow a comparison of changes. Over a 2 week period the use of video recording to record the nightly sleep hours and the use of a heart monitor to record the tension states would be utilised to observe the changes. It is hypothesised that as the participants heart rate, and tension state increases, the participant become more motivated and sleep hours will increase, bringing about a decrease in heart rate during sleep hours.

From the behavioural perspective sleep deprivation would be explained as an incentive for the participant to stay in a state of arousal. Experimentation research methods are used to study this perspective (Burton et al., 2009). The biological variable, hours of sleep, are recorded using video recording, and the theoretical variable, the heart rate, is monitored using a heart monitor and the findings recorded. (Burton et al.). It is hypothesised that where an incentive is evident, the heart rate will stay high, rather than decreasing and satisfying the internal tension state, therefore decreasing the motivation to sleep.

#Strengths of this method are that research finding can be replicated it causation can established, and variable are managed (Burton et al., 2009). Shortcomings are that experimental research methods alone are not sufficient to establish generalisability or for the investigation of complex

topics (Burton et al.). As the strengths outweigh the shortcomings, this perspective is recommended for the study of sleep and sleep deprivation.

The early philosophical questions by Rene Descartes, led to a greater importance on the role of reason in creating knowledge (Burton et al., 2009). William Wundt is considered the founder of the cognitive perspective which focuses on "mental processes" which include thinking, the ability to problem solve, retain memory, language skills and a decision-making ability (Burton et al.). The expectancy value theory implies that a person is motivated by evaluating how valuable an outcome is and also how strongly they believe they can achieve it (Burton et al.).

Sleep is explained as a consciously chosen activity considered both valuable and attainable. The method of research to test this theory would be survey (Burton et al., 2009). The biological variable, hours of sleep, recorded in a sleep diary, and the theoretical variables, the participant's level of expectancy to achieve sleep, and the value associated with sleep, would be measured through a survey. Correlation would then measure the relationship between these variables (Burton et al.). It is hypothesised that when the level of expectancy to attain sleep is high and the value associated with sleep is high, then the recorded hours of sleep will be greater.

Sleep deprivation is explained as a low priority being allocated for sleep and the miscalculation of the direct consequences, leading to the belief that any negative consequence will not affect the person. Survey and correlation are the research method applied in the behavioural perspective (Burton et al., 2009). The biological variable, hours of sleep recorded in a sleep diary, and

the theoretical variables, the level of expectancy to achieve sleep, and the person's associated value of sleep, would be measured through a survey. It is hypothesised that when the level of sleep expectancy is low and if the associated value of sleep is low, the hours of recorded sleep will also be low.

Strengths of this study are the results can be quantified, large samples can be collected, thus enabling generalisability (Burton et al.). Shortcomings of this study are that self reported surveys are susceptible to participant interpretation and biases (Burton et al., 2009). As shortcomings outweigh strengths, this perspective is not recommended as a study of sleep and sleep deprivation.

During the 1950's the humanistic perceptive emerged and was greatly influenced by the work of Carl Rogers and Abraham Maslow (Burton et al., 2009). Both emphasised the role of motivation on thought and behaviour, their theory was founded on the idea that each person has the ability contribute to society, if their needs are fulfilled (Burton et al., 2009). The 'Hierarchy of Needs' was developed by Maslow who believed that as a person's needs were met, in the correct order, individuals are able to become self actualised, a proficient person. It is only after the individuals basic physiological needs are met, that they can move on to the next stage (Burton et al.).

Sleep, according to this perspective is a basic human need, motivated by unfulfilled physiological needs. The hierarchy of needs is founded on the humanistic perspective, and behaviour is shaped by the need to self-actualise to fulfil a person's full potential (Burton et al., 2009).

Sleep deprivation cannot be explained from the hierarchy of needs perspective. There is no scientific method for research applied in this perspective (Burton et al., 2009).

The strengths of this study are the focus on the uniqueness of the individual, and it does not assume general standardisation. Shortcoming are there is no scientific method and does not display the characteristics of good psychological research (Burton et al., 2009). The hypothesis is entirely theoretical and cannot be tested or generalised (Burton et al.). As the shortcomings of this method of research are greater that the strengths, this perspective is not recommended to study sleep and sleep deprivation.

This essay examined the motivation for sleep and sleep deprivation, from 5 psychology perspectives. The rationale for this essay was to evaluate the 5 perspectives named in order to identify what motivates people to sleep or not to sleep and to determine which perspective best understands the motives behind the behaviours of sleep and sleep deprivation. Wilson (2005) stated that within the America population, the prevalence of sleep deprivation is 10% to 15%. Wilson identified symptoms of sleep deprivation including deterioration in the attention span, fluctuating mood and anxiety. Consequences of sleep deprivation include heart disease, type II diabetes and psychiatric disorders (Wilson).

The strengths of evolutionary perspective study are that it allows for observation of natural behaviour in a natural setting and provides the opportunity to study research which cannot be observed within a laboratory (Burton et al., 2009). The ability to measure unconscious processes are

strengths of the psychodynamic perspective (Burton et al.). The behaviourist perspective applied an experimental method even though natural behaviour is not fully replicated in a laboratory situation (Burton et al.). The cognitive perspective strengths are that the results can be quantified, large samples can be collected, therefore enabling generalisability (Burton et al.). The strengths of the Hierarchy of Needs perspective are that the study focuses on the uniqueness of the individual, and it does not assume general standardisation (Burton et al.). All perspectives examined failed to forecast causation (Burton et al.). An assessment of the merits of the 5 perspectives studied implies that the strengths of the behaviourist perspective outweigh the other perspectives (Burton et al.). It is therefore recommended that the behaviourist perspective is the most effective perspective for investigating sleep and sleep deprivation.