States of Consciousness:
Narcolepsy and Insomnia

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Researchers have been trying to decipher the mysteries of human behavior and the processes of the brain for centuries. The search for answers often leads to new questions as researchers push further into uncharted territory. The state of hypnotization is a controversial topic that raises the question of whether or not it is possible for people to be hypnotized. The study of sleep and dreams also offers the opportunity to discover more about why people dream and what happens while they sleep. Further exploration of human sleep also leads to information concerning the affects of various drugs on the brain and how disorders such as narcolepsy and insomnia function. A study of these areas will lead to a better understanding of the human body and how it operates.

In Module 18 of Psychology, Meyers in Modules, hypnosis is described as a situation where one person tells a subject to do something, but the subject does not realize what they are doing. A stereotypical hypnotizer might say such words as, “Your eyes are growing tired…your eyelids are becoming heavy…now heavier and heavier…” (p. 260). Hypnotists often use verbal coaxing and careful alteration of their tone of voice to lure their subject into a trance. Some people believe that they can be hypnotized, while others believe it is simply a hoax or joke. Nobody would know for sure whether or not hypnotization is really possible unless they were to be hypnotized themselves. An example of this would be the recent event at Manchester College that featured a hypnotist. Quite a few of the students were hypnotized and many of the students found that the technique was possible to carry out.
Sometimes people use hypnosis to make other people remember certain points in time or specific events. This technique is often used to help adults recall events from their childhood and discover causes of problematic behavior. This is sometimes effective because people are not always capable of remembering certain things while awake. “Under hypnosis a person can recall childhood events with very high accuracy” (p. 262).

Most people are able to experience hypnosis, but some are able to reach a deeper level of hypnosis than others. Hypnotism is also used to relieve pain and eliminate habitual behavior. To accomplish this, hypnotists talk to patients during a state of hypnosis and carefully instruct that they will not feel pain. Many patients have reported that this technique of pain control does work. However, hypnotism does not always mean that a person will experience drastic changes. Some hypnotists have found that in some instances being hypnotized is no different from being awake (p. 265).

Module 19 discusses how some chemicals affect the brain, and why people act the way they do after taking drugs. There are three different types of drugs, specifically referred to as psychoactive drugs, which are categorized as depressants, stimulants, and hallucinogens. These drugs alter the function of the brain in various ways. A depressant slows down the nervous system. Alcohol is an example of a depressant that tends to cause slurred speech, slower reflexes, and other side effects (p. 272). Alcohol has a reputation of being a drug that lowers a person’s inhibitions and causes him/her to be less apprehensive. “Liquor is the quicker pick-her-upper” (p. 274). Research has shown that some people become alcoholics due to their genetic inclination to become addicted to certain chemicals.
Stimulants speed up the nervous system and are very addictive. These drugs are often referred to as “speed” in some forms that are abused. Coffee, which contains caffeine, is a stimulant because it helps people to stay awake. Most drugs that help people lose weight or give them more energy are also considered stimulants. When the drugs start to wear off, people may experience headaches, depression, or become tired. One of the most powerful stimulants is cocaine (p. 275). Marijuana is an international stimulant that is very commonly abused. Hallucinogens make people see images that are not real. Marijuana is considered a hallucinogen because it helps put the images that people see together. This drug alters the mind and causes memory loss. Most of these drugs stay in the body for at least a month (p. 277).

Module 17 covers various sleep disorders such as narcolepsy and insomnia. The module also discusses the body’s different sleep stages, what types of activities done that affects sleep, what happens when people do not get enough sleep, and why people dream. In order for people to be fully alert, they need to get at least eight to ten hours of sleep a night. “We awake refreshed, sustain better moods, and perform more efficient and accurate work than do those who get less sleep.” When people do not get enough sleep, they tend to become accident prone. They are at a higher risk of being involved in accidents while driving and operating machinery. Lack of sleep also makes it harder to concentrate on studying, paying attention in class, and watching movies (p. 250).

The human body goes through different sleep stages. Rapid eye movement, also referred to as the REM cycle, occurs just before stage one. This is where “…every half minute or so your eyes dart around in a momentary burst of activity behind closed lids” (p. 248). Dreaming, relaxed muscles, and arousal occur during this time as well (p. 247).
The first stage takes place within the first five minutes as a person falls to sleep. During these few minutes, most people see images and it is much like a short dream. Stage two is about twenty minutes long and the brainwaves begin to pick up speed. This is a period of time that people may talk in their sleep. Stage three begins a transformation that only lasts a few minutes and leads to the deep sleep of stage four. Stage four lasts about thirty minutes long and is the time that is often the most difficult to awaken a person. Bedwetting, sleepwalking and night terrors are also found to occur during stage four.

Every person has a biological time clock, which is also referred to as biological rhythm. “Over varying periods of time, our bodies fluctuate, and with them our minds” (p. 243). The human body has to adjust to new atmospheres. This is the reason why people experience “jet lag” after traveling on an airplane. Traveling a great distance from one time zone to another time zone interrupts the body’s biological clock and causes problems with the biological rhythm. There are four different types of biological clocks that are found in humans. The annual cycle occurs when the body adapts to changes in the weather. The twenty-eight-day cycle, which relates to PMS, is the monthly cycle is often affiliated with a woman’s menstrual cycle. The twenty-four-hour cycle often pertains to body temperatures and the ninety-minute cycle refers to how long a sleep cycle lasts (p. 243).

Module 17 also covers other sleep activity, such as dreaming and some disorders. The module presents some ideas concerning the causes and meanings of these behaviors. Many dreams relate back to events that occurred throughout the day. Dreams can be used to help solve problems with relationships and other challenges that a person may be coping with at that point in his/her life. “Yet, dreams are so vivid we may confuse them
with reality” (p. 255). Dreams are basically a time for the mind to reflect on experiences. Some of the different sleep disorders are sleep apnea, insomnia, and narcolepsy. Sleep apnea is a condition where a person stops breathing while he/she is sleeping, and wake up slightly to catch their breath. Apnea tends to cause loud snoring and is a very common problem (p. 254). Insomnia is a condition where people have trouble going to sleep or they have trouble staying asleep. Some people take over-the-counter or prescription medications to help address the problem of insomnia. Narcolepsy is somewhat the opposite of insomnia in the sense that people suffering from narcolepsy fall asleep when there is not much activity going on. The worst cases of narcolepsy involve a person that falls asleep uncontrollably at any time. “…sometimes occurs at the most inopportune times, perhaps just after taking a terrific swing at a softball…” (p. 253).

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Imagine a typical night for an insomniac. Think of a person lying in bed, tossing and turning for hours on end and trying to fall sleep. Maybe that person never falls asleep that night or he/she just sleep for short periods of time and wake up in the morning exhausted. Now, imagine a large group of people standing around talking to each other. Suddenly a man suffering from narcolepsy falls to the floor and sleeps for a few minutes. Although these might seem like strange occurrences to some people, these are a common part of some people’s lives.

Narcolepsy is a dangerous and life-long sleeping disorder, “Approximately 250,000 people have a disorder of Narcolepsy” (Thorpy, 1991, p. 204). Some people do
not have narcolepsy as bad as others. In order for narcoleptics to fall asleep, they usually have to be in a very quiet place. For example, when they are watching TV, relaxing, reading, in a meeting, during a movie, while watching a play or concerts, or while driving, riding in a bus or airplane (p. 135). “If you have ever gone without sleep for 48 hours, you have experienced the sleepiness that a narcoleptic lives with every day” (p. 77). Narcoleptics have a higher risk of getting into a car accident than anyone else (p. 135). Those who have a more severe case of narcolepsy tend to have sleep attacks. The sufferer falls asleep no matter what they are doing. This can happen anytime and anywhere. “After hearing the punch line of the joke, the teenager falls to the floor…” (Siegel, 2000, p. 77). Narcoleptics usually stay asleep from five minutes to one hour when they suffer an attack (p. 135).

A lot of different activities take place while a person is taking a nap. For example, REM sleep occurs, along with cataplexy, sleep paralysis, and hypnogogic hallucinations (p. 135). As explained earlier, REM sleep is when the body’s muscles are relaxed, they might be aroused, and maybe dreaming (p. 247). Cataplexy is when the muscles weaken. Any emotion that happens suddenly, like laughter or anger, can cause a person’s muscles to weaken and make them fall down, “…the jaw may droop or the head will sag or the wrist will go limp” (p. 135). During cataplexy people do not lose consciousness, and they are able to hear, have feeling, and are aware of what’s around them (p. 76). Cataplexy can be taken care of by taking antidepressant drugs (p. 135). Sleep paralysis usually happens after narcoleptics have fallen asleep and when they try to wake up they cannot move, it lasts a few seconds until the person becomes completely awake (p. 136). Another possible reaction that can occur is hypnogogic hallucinations.
These hallucinations happen when the person is starting to fall asleep. Some people picture images where their house is being hit by a tornado, most of the time these hallucinations are scary (p. 136).

A lot of people feel embarrassed when they have their attacks. There are some ways to help treat narcolepsy, but there is not a way to prevent it. Some possibilities to help control these happenings are:

- Planned naps.
- Eat light or vegetarian meals before attending an activity, heavy meals make people sleepier.
- Prescription medicines, along with some stimulants.

By doing these things it is possible to limit the amount of attacks that can happen (A.D.A.M., 2002).

Insomnia is a more common sleep disorder than narcolepsy. There are a number of people in the world who have a sleep disorder, some more noticeable than others, “Affects about 40 percent of women and 30 percent of men” (Hunt, 2002). Another one that has affected more than 70 million people is insomnia (A.D.A.M.). Insomnia is when people have trouble either going to sleep or staying asleep. There are two types of insomnia: primary insomnia, and secondary insomnia (Hunt). Primary insomnia is when people have problems sleeping but it is not related to health problems. Secondary insomnia, is when people have trouble sleeping because of health problems.

People cannot get insomnia and predict when it will start or when it will end. It can last as long as it wants to. There are two different ways to classify what group people are in when talking about time. There is acute insomnia, this lasts anywhere from one
night to a few weeks. Some causes are if somebody just lost their job, he/she might have an illness, or many other reasons. The second type is chronic insomnia, and this one usually lasts from three times a week to around a month or so. Bigger factors like depression cause chronic insomnia (Hunt).

There are many ways people can acquire insomnia. Every once in a while a person gets something similar to insomnia at least one night in their life. Here are some factors that might cause insomnia: jet lag, anxiety, aging, alcoholism, working shifts, grief, depression, worry, and many others. There are two major causes that are the reason why most people get insomnia, depression and bad sleep habits (A.D.A.M.).

Some ways to tell if people have to deal with insomnia are: if they have low energy levels, tired all the time, circles under the eyes, and if they seem to get irritated a lot. If people get irritated, they seem to want to take a lot of medicine so that they can sleep. Some try to use tranquilizers, and antihistamines which are not good to take because people start to become dependent on the drugs, and sometimes they can cause memory impairment. The only types of medicine that really work are antidepressants (A.D.A.M.). Sometimes doctors will prescribe sleeping pills for a short period of time.

Although researchers are still working on finding ways to prevent these sleeping disorders, and trying to figure out how the human body functions, research has come a long way and people are at least becoming aware of ways to prevent it. It is important to understand these concepts.