Unit 12: Body Rhythms and Mental States

Every day we experience a cyclical change in the basic character of our mental experience: we change from a state of wakefulness to a state of sleep. This transition radically alters our perception, our sense of consciousness, and the nature of our behavior. The onset of sleep is not, however, the only way in which our general mental state may be changed. Consciousness-altering drugs can affect perception, mood, and behavior. According to some, hypnosis has similar perception-altering and behavior-altering properties. In this section of the course you will learn about some of these influences on consciousness. The focus of this section of the course will be on sleep and hypnosis as state-of-consciousness altering phenomena.

READING: Chapter 5

During this unit, we will explore the questions of:

1. Biological Rhythms (pp. 142–150)
2. Sleep (pp. 150–161)
3. Hypnosis (pp. 170–175)
Part 1: Biological Rhythms (pp. 142–150)

Circadian Rhythms (142–146)

The sleep-wake cycle is the most obvious manifestation of our body’s daily, or circadian, rhythm. Other circadian rhythms include cyclical daily changes in body temperature and the release of various hormones. A basic question regarding these cycles is the issue of what it is that governs or regulates the cycle. Obviously, the rhythm is somehow tied in with the light-dark cycle that we experience each day. We know this because of the clear evidence that humans are inherently diurnal creatures (we are awake during the day and sleep at night). The question is whether we also possess some form of internal biological clock that contributes to the regulation of our various physiological and psychological circadian rhythms. What would happen, for example, if the light-dark cycle were totally under your control, so that you could sleep whenever you wanted, stay awake for as long as you wanted, and had no clue to time? How long would you stay awake and how long would you sleep if you were not exposed to the normal light-dark cycle produced by the rising and setting of the sun? Would you still function on a 24-hour day?

In order to address this issue, researchers have spent time in deep caves or in specially designed rooms that prevented clues to true time. The subjects in these studies are said to be functioning under “free running” conditions. You can view a discussion of one of the most famous of these studies in the biological rhythms video segment.

VIDEO: Click here to see the first sleep video.

Two findings are of interest from these studies. First, most people settle into a fairly regular daily cycle, suggesting that there is, in fact, some kind of internal biological clock that helps regulate our circadian rhythms. Second, although there are some individual differences in the length of the average cycle, most people settle into a cycle that is slightly longer than 24 hours. Different researchers have estimated this average to be between 24.3 and 25 hours. Of course, even a 20- or 30-minute daily desynchronization between our biological clock and the true 24-hour day would, over just a short period of time, result in a radical change in when we slept and when we were awake. The fact that we continue to maintain a true 24-hour cycle indicates that our biological clock must be recalibrated to a small degree every day, presumably as a result of our exposure to the light-dark cycle.

Long-Term Rhythms (pp. 146–150)

As you read this section, ponder the following questions:

1. Do the seasons affect our mood?
2. Does the menstrual cycle affect women’s moods?
Part 2: Sleep (pp. 150–161)

In this part on sleep, we will be looking at four topics:

1. The sleep-wake cycle
2. Sleep disorders
3. Why do we sleep?
4. Why do we dream?
The Sleep-Wake Cycle

Although we usually think of sleep as a unitary phenomenon (we are either awake or asleep), there are, in fact, several different stages of sleep that we pass through each night. Sleep begins with the transition from wakefulness into a mental state that is at the transition between being awake and being asleep: a hypnagogic state. During this very odd mental state, our minds tend to wander in an almost dream-like way, but we are still awake and we are still taking in information from the world. A time when you are most likely to be aware of entering this state is when you doze off in class! Assuming that you have not put your head down completely on your desk, when you begin to doze off you are likely to start have strange dream-like thoughts incorporating some of what is going on around you—and then, at the moment you fall fully asleep, your head drops down as the muscle tone in you neck is relaxed, and the action of your head dropping down awakens you. At that point, you wipe the drool from the sides of your mouth, and you try to pay attention once again.

Once you enter sleep, you pass through four distinct stages of sleep, involving the passage from shallow to deep sleep. You then move more quickly back into stage one, and repeat the cycle four or five times per night. There is one important change, however, when you enter stage one sleep at the beginning of your second full cycle. This time, stage one is accompanied by rapid movements of your eyes, a phenomenon that gives this form of sleep its name, Rapid Eye Movement (or REM) sleep. It is during REM that one of the oddest features of sleep occurs. This is when we dream.

The Sleep Stages video describes the different sleep stages in terms of the systematic changes in brain wave patterns that define each stage. One point to note in the video segment is the reference to the surprising fact that most sleep talking and sleepwalking occur during deep sleep, not during REM.

VIDEO: Click here to see the second sleep video.
Sleep Disorders

The most common sleep disorder is insomnia, characterized by difficulty falling asleep or staying asleep at night, combined with sleepiness during the day. In most cases, the cause is psychological or lifestyle related; there is some feature of the individual’s lifestyle or there is some problem in the individual’s life (something the person is worrying about) that is interfering with sleep. The biggest problem with insomnia is sleepiness during the day. Usually, the problem will go away on its own or through the application of basic principles of how to get a good night’s sleep (see page 177–178 of your textbook). Unfortunately, in many cases, even after the initial cause of the insomnia is dealt with, the insomnia itself becomes a source of worry that interferes with sleep. In other words, the individual becomes so worried about not being able to sleep that he or she can’t fall asleep.

A disorder associated with REM sleep involves what are called “violent sleepers.” Violent sleepers are individuals who literally act out their dreams! Obviously, this can be very dangerous to both the individual and, in some cases, any person the violent sleeper may be sleeping with. A violent sleeper dreaming of playing football may get up and run into a wall. A violent sleeper dreaming of being attacked may try to do harm to the person next to him or her in bed. One violent sleeper treated in a sleep clinic in Greensboro NC came in for treatment after she became aware that, during her dreaming sleep, she was getting up and eating during the night. She finally came for treatment after finding a partly eaten package of raw bacon one morning.

As odd as this disorder may sound, in some ways it is not surprising at all. In fact, a more basic question is why we don’t all do this. When we dream, our cortex, including our motor cortex, is very active, much the way it is when we are wide awake and doing things. Why then don’t we move around a lot when we are dreaming? Contrary to what most people believe, we are actually very inactive during REM sleep. We move around more during deep stages of sleep than during REM (although we may move more just at the point of awakening, which gives us the sense that we move a lot when we are dreaming). The reason for the lack of movement (except for the eyes) during REM sleep is that there is a part of the brain that actively inhibits the voluntary muscle systems during REM sleep. If it were not for this inhibition, we would all act out our dreams! In the case of violent sleepers, the inhibition system sometimes malfunctions. There are some medications that can help with the problem.

A particularly serious sleep disorder is narcolepsy. The four classic symptoms of the disorder are:

1. **Excessive daytime sleepiness.** People with narcolepsy usually fall asleep in any situation that would make the average person a bit drowsy, such as during a lecture.

2. **Cataplexy.** This involves sudden, brief episodes of muscle weakness or paralysis brought on by strong emotions such as laughter, anger, surprise or anticipation. One woman whose husband had narcolepsy reported that she could always tell if...
he really thought a joke was funny, because he would start to laugh and then fall into a heap on the floor. This tendency to lose all voluntary muscle tone during moments of high excitement can also play havoc with an individual’s social life.

3. **Sleep paralysis.** This is paralysis upon falling asleep or waking up.

4. **Hypnagogic hallucinations.** Narcolepsy also involves particularly vivid hypnagogic hallucinations (vivid dream-like images that occur at sleep onset).

Narcolepsy is now known to be, to some degree, a disorder of the REM sleep control system. Cataplexy involves the turning on the REM-sleep-associated motor-inhibition system at a moment when the person is wide awake. Note that patterns of brain activity during REM sleep are very similar to those that occur when we are wide awake and very excited. When people suffer from narcolepsy, that similarity results in motor inhibition being triggered by both REM sleep and by the closely related “awake and highly aroused” pattern of brain activity. In addition, when people with narcolepsy fall suddenly asleep during the day, they usually go immediately into REM sleep. Similarly, the sleep paralysis that such individuals sometimes experience involves a maintenance of the motor inhibition component of REM sleep beyond the moment of awakening.

Much of our knowledge of narcolepsy, and the discovery of drugs that help control the symptoms of the disorder (although the drugs do not cure the disorder), comes from research with dogs who suffer from narcolepsy. You can see the behavior of a couple of narcoleptic dogs in this video clip below.

**VIDEO:** Click here to see the video clip on **dogs who suffer from narcolepsy**.

Many people report having had an experience of sleep paralysis a couple of times in their life—a time when they woke up but for a few moments were unable to move. This experience can be quite frightening, but it usually last only a couple of seconds. Some people, however, have occasional sleep paralysis episodes that last several minutes, and these episodes are often accompanied by hypnagogic hallucinations (hallucinations that involve a mixing of the dream state with awake perception). These episodes can be truly terrifying, and often produce a sense of being outside of oneself—an out of body experience. In addition, as you will read in the article below, these extended episodes of sleep paralysis have been implicated in many of the cases of individuals who have come to believe that they have been abducted by aliens.

**REQUIRED WEBLINK:** Hypnagogic hallucinations: [http://www.csicop.org/si/9805/abduction.html](http://www.csicop.org/si/9805/abduction.html)
Why Do We Sleep?

Given that we spend one-third of our lives asleep, it is quite surprising that the purpose or function of sleep is not well understood. If I were to ask you for an explanation of the function of sleep, you would undoubtedly generate a form of one theory of sleep called “Restoration Theory.” According to this theory, our bodies need sleep in order to recover from the activity we engage in during the day. Almost everyone comes to this conclusion based upon the obvious evidence that we get sleepy after being awake and active for a period of time.

Scientists also know that extended sleep loss is associated with some kinds of abnormal physiological functioning, particularly problems in the immune system. However, those kinds of problems do not involve the simple “running down” of some kind of energy source, the way classic restoration theory suggested. In fact, if there is something that simply “runs down” when we stay awake for long periods, no one has yet been able to figure out what that something might be. Another finding that raises some questions for a simple form of restoration theory is that we know that sleep is an active, rather than a passive, process. At night, our biological clock initiates a set of processes that lead to us feeling very tired and wanting to go to sleep. Many scientists today think that sleep may be particularly important for proper brain functioning. We know that when we are tired the quality of our mental functioning deteriorates dramatically. Again, though, exactly what sleep does to help the brain isn’t well understood.

A somewhat different approach to understanding the function of sleep has been to consider its possible role as a survival mechanism. Some psychologists who have taken an evolutionary perspective on the question of sleep’s function have hypothesized that sleep may serve to ensure that we remain fairly quiet and immobile during the part of the 24-hour day when we do not function well and are at greatest danger, that is, during the night.
Why Do We Dream?

REM sleep is sometimes referred to as “paradoxical sleep” because during REM sleep, our bodies are very quiet but our brains are very active (as active as if we were wide awake and very alert). What is the purpose of this form of sleep, during which our brains are very active—activity that produces the phenomenon we call dreaming?

Dreams as Unconscious Wishes

Freud was the first to hypothesize that we need to dream in order to satisfy unconscious wishes and to work through unconscious conflicts. According to Freud, our unconscious feelings are represented symbolically in our dreams. The true meaning of a dream, according to Freud, is not at the surface level of what actually happened in the dream, but at a deeper level corresponding to the symbolic meaning of the elements of the dream.

There are a lot of web sites you can go to that will interpret your dreams for you. The problem with all of these sites, and with the basic approach that Freud and his followers have taken, is that there are no rules about how to interpret a dream and there is no way of knowing if any interpretation is correct. In other words, the whole approach is non-scientific. Fun perhaps, but not testable scientifically.

Fairy tales. One interesting extension of the Freudian/psychoanalytic approach to dream interpretation has been the application of these ideas to the interpretation of fairy tales. According to the psychoanalytic analysis of fairy tales, these tales developed as they did precisely because they contain elements that correspond symbolically to common unconscious feelings. Probably the most analyzed (skeptics would say overanalyzed) of all the fairy tales is Little Red Riding Hood, which in the hands of the psychoanalytic psychologist becomes a tale filled with sexual desire and oedipal conflicts. You can find a good discussion of these interpretations below, but before reading this article it would be a good idea to review what you learned about Freud’s theory of personality development in the section of the class on personality. (The article, by the way, is by Martin Gardner, famous skeptic and long-time author for Scientific American of a column on mathematical games.)

REQUIRED WEBLINK: The meanings of Little Red Riding Hood:
http://articles.findarticles.com/p/articles/mi_m2843/is_5_24/ai_67691833

Dreams as a Reflection of Current Concerns

Even those who are skeptical of Freudian dream interpretation do not question that our dreams sometimes do reflect our current concerns and desires. More controversial is whether dreams help us to actually work through our current life issues. Some psychologists believe that we find solutions to life problems though our dreams that we would not find if we didn’t dream. Skeptics note that there is zero evidence that this is true.
Dreams as a By-product of Mental Housekeeping

There is some intriguing evidence that when people are selectively deprived of REM sleep (by waking them up whenever they enter REM), their memories for the events of the previous day are impaired. Exactly why this happens, though, is not well understood. One theory posits that REM sleep helps strengthen important synaptic connections used a lot during the day. Another theory posits that REM sleep helps weaken synaptic connections associated in some way with our memories for unimportant events, helping our memories for important events stand out. At present, both these views remain quite speculative.

Dreams as Interpreted Brain Activity: Activation-Synthesis Theory

According to this view, we don’t have REM sleep because we need to dream. Instead, we dream because we need REM sleep, and REM sleep just happens to produce the experience we call dreaming. The supporters of this view point to the evidence that humans are not the only creatures who have REM sleep. In fact, REM sleep can be found in many animals, including, for example, chickens. In addition, there are important age differences in amounts of REM sleep. Newborn humans sleep about 16 hours per day, and spend fully 50% of that time in REM sleep. Late during prenatal development the amount of time spent in REM sleep is even greater. At a minimum, this evidence certainly challenges the “Dreams as Unconscious Wishes” and “Dreams Help Us Solve Current Problems” theories of why we dream. What, for example, could there possibly be in the life of a newborn that is so difficult to cope with that the newborn would need 8 hours of dreaming to deal with the issues?

This theory, however, simply begs the question of why it is that we need REM sleep. The “mental housekeeping” theories offer one approach to that question. Another approach is to consider the role of REM sleep in brain development. We know, based upon decades of research on brain development, that brain development depends upon brain activity. According to “autostimulation” theory, we need a lot of REM sleep early in life because (1) the brain is developing very rapidly, and (2) we spend so much of our time sleeping or crying and therefore unresponsive to our environment (and prenatally, our brains are not being stimulated by features of the outside world environment at all). REM sleep thus provides a way to produce very high levels of brain activity without that activity depending upon stimulation from the outside world.

There is a good discussion of some of these theories, particularly Freud’s theory and activation-synthesis theory, in the video segment on why we dream.

VIDEO: Click here to see the third video on sleep.
Part 3: The Riddle of Hypnosis (170–175)

Despite the fact that scientists lack a complete understanding of the purpose of sleep, no one questions whether people “really” sleep, nor are there questions regarding sleep’s essential characteristics. In the case of hypnosis, in contrast, the controversy regarding the phenomenon extends to the most basic of questions—What is hypnosis?

In this section, we will be looking at such topics as:

1. Origins of hypnosis
2. Some basic facts
3. Effects produced under hypnosis
4. Theories of hypnosis
Origins of Hypnosis

The use of hypnotism can be traced all the way back to the time of the ancient Egyptian pharaohs. The Egyptians built marvelous “dream temples,” which were watched over by one of their many gods. A person would travel to the temple, bringing with them an offering for the god. The priest would instruct them to lie down, then lead them into a trance and instruct them to dream an answer to the problem or question they had in their mind.

The more modern use of hypnosis traces back to the late 1700s and the work of an Austrian physician named Franz Anton Mesmer. Mesmer had worked with magnetics and believed (along with most of his contemporaries) that magnets had some power over the fluids within a person’s body, and that when patients were under the influence of the magnetic forces they would go into a trance.

In his treatment sessions, Mesmer would usher patients into a darkened room where violins were playing. He himself would be wearing a long flowing cloak covered in stars and holding a wand. In the center of the room was a large tub from which protruded several metal rods from which the magnetism was believed to flow as Mesmer then talked them into trance. Patients would hold onto a metal bar, listen to Mesmer’s voice, and then often go into a trance state in which they would fall back and go into convulsions on the floor.

After a time, Mesmer came to notice that the actual equipment did not seem to be important. He learned that he could produce the same effect, and the same kinds of “cures,” simply by moving his hands in front of the patient’s face in accompaniment to his voice. This did not, however, change Mesmer’s views of the role of magnetism in producing a healing effect. Instead, he concluded that he literally possessed magnetic powers! Mesmer’s work gave rise to the term “mesmerism” to describe the process of produce a trance-like state in a patient. Today, we refer to the same process as hypnotism.
Some Basic Facts About Hypnosis

_Hypnosis has no relationship at all to sleep._ Although hypnotists sometimes talk in terms of “putting the subject to sleep,” and although the term hypnosis comes from the Greek “ypnos,” which means sleep, hypnotized subjects are not asleep. Even if the hypnotist says to the subject “You are now asleep,” the subject is not asleep; instead, the subject is doing what you or anyone else would do when pretending to be asleep.

There are large individual differences in hypnotizability, and the success of hypnosis depends more on the characteristics of the subjects than the skill of the hypnotist.

_You cannot be hypnotized against your will._ Hypnosis is best thought of as a cooperative agreement between the subject and the hypnotist. Indeed, many hypnotists believe that all hypnosis is self-hypnosis; the hypnotists merely facilitates the process of the subject putting him- or herself into a hypnotic state. If you go to a hypnosis stage show, you will see that the stage hypnotist does not randomly select people from the audience to be hypnotized. Instead, everyone who participates is a volunteer. In addition, at the beginning of the show, a series of “hypnosis induction” exercises will be used by the hypnotist to find those volunteers who are most hypnotizable. In the first hypnosis video segment, you will see a stage hypnotist go through the process of picking out highly hypnotizable subjects to appear in his act.

VIDEO: Click here to see **how the hypnotist does it.**
Effects Produced Under Hypnosis

Hypnosis produces—or is believed to produce—several different effects. Not all of these are supported by scientific evidence.

Heightened Suggestibility

By definition, a hypnotized subject has agreed to do his or her best to follow the suggestions of the hypnotist. The questions of interest concern the limits of hypnotic suggestibility and whether people are able to accomplish feats under hypnosis that they wouldn't be able to accomplish in a non-hypnotized state.

Regarding the first question, the answer is clearly that there are indeed limits to hypnotic suggestibility. Hypnotized people cannot be forced to do things against their will. In general, you cannot get people to do things while hypnotized that you could not get them to do using other powerful forms of social influence. It is worth keeping in mind, though, that (as you will learn in the social psychology section of the course) it can sometimes be quite surprising how willing people are to follow directions in a situation where they are able to feel that they are not responsible for their actions.

Regarding the second question, the answer is that all feats performed under hypnosis can be performed by highly motivated, highly focused people without hypnosis.

The second hypnosis video segment will show you hypnotized subjects following suggestions of various kinds as part of a hypnosis stage show. Note that, however much it may appear that the subjects are just acting, in their own comments on the experience they consistently maintain that the experience was very real to them.

VIDEO: Click here to see the second video on hypnosis.

Age Regression

Some therapists who use hypnosis believe that hypnosis can be used to literally age regress individuals into their minds as they were at an earlier age. The goal of this therapeutic age regression is almost always to enable the subject to remember some event (e.g., the experience of sexual abuse) from early childhood or infancy.

Is this a real phenomenon? Research clearly shows that the answer is—no. Hypnotically age-regressed people talk and act the way they think a 4-year-old or 2-year-old would talk and behave, but they do not really talk or act like a 4-year-old or 2-year-old. Moreover, their memories for real early childhood experiences are not improved by hypnotic age regression (although there may be an increase in confabulated memories; see the discussion of memory effects below). An important feature of the age regression experience, however, is that subjects usually think that they have really been age regressed; they do not have a personal sense of deliberately pretending. This is another example of the phenomenon of trance logic; we can prove the individual is pretending to
be a younger age, but the individual subjectively feels that he or she really was that younger age.

Interestingly, it is as easy to age progress people under hypnosis as it is to age regress people. People have also been age regressed to the moment of birth, and even beyond—into the prenatal period—and even beyond that into the realm of history, resulting in people believing that they have been age regressed into themselves in a past life. The first “Past Lives” video segment presents a group of people in California who all thought they had lived as neighbors in a town during the Civil War. Note how convincing the people and the therapist are. Clearly, both the subjects themselves and the therapist believe that the past life reports being produced under hypnosis are very real. But then watch the second “Past Lives” video to see if the reports can withstand a bit of scientific scrutiny.

**VIDEO:** Click here to see Past Lives 1.

**VIDEO:** Click here to see Past Lives 2.

**Improved Memory**

One of the most controversial aspects of the use of hypnosis involves its use to improve memory. An individual has witnessed a crime, but can only remember a few of the details. Would it be useful to hypnotize the individual to help the individual remember more details of the crime?

A number of studies have found that although hypnosis will typically increase the amount of information reported, it does not increase overall accuracy levels. Instead, the increase in the amount of information reported typically includes an increase number of inaccurate details. What makes this phenomenon particularly dangerous is that these false memories produced under hypnosis are likely to feel very real to the subject. In a court case, a memory first elicited under hypnosis is likely to be presented at trial as real, and with a great deal of confidence, even if the detail (or event as a whole) is false. For this reason, many states do not permit memories elicited first under hypnosis to be presented as evidence in a court of law, and both the American Psychological Association and the American Medical Association oppose the use of hypnotically refreshed memories in court.

**Altered Perception**

Highly hypnotizable subjects can be lead to perceive things differently from the way they really are, to perceive something where there is nothing (a positive hallucination) and to perceive nothing where there is something (a negative hallucination). Certainly the reports, and many of the behaviors, of the subjects are consistent with the altered perception. In the video segment on suggestion effects, for example, the gentleman with the broom acted as if he was really seeing the broom as Cindy Crawford, and he later claimed that he really saw the broom as Cindy Crawford.
Under some conditions, however, it can be shown that what the subject reports does not correspond exactly to what the subject must really be perceiving. Consider the following situation (which has been used in some research on negative hypnic hallucinations). The subject is hypnotized and told that he is blind to diagonal lines. The subject is then shown the classic Ponzo (or train tracks) illusion.

In this illusion, the two horizontal lines are the same length. However, the presence of the two diagonals makes most people judge that the upper line looks a bit longer.

Our hypnotized subject is asked what he sees. He says that he sees two horizontal lines, and nothing else. He is then asked if one line looks longer than the other. The subject is likely to say that the top line looks a bit longer. Note, however, that although the subject’s claims to not see the two diagonal lines, it is only the presence of the two diagonal lines that makes the upper line look longer!

In this case, what the hypnotized subjects says about his perceptual experience is not completely consistent with what we can prove must be true about his perceptual experience. This is not to claim that the subject is deliberately lying. Rather, this is an illustration of a common feature of hypnosis, trance logic. Trance logic refers to a discrepancy between reports by the hypnotized subject regarding the nature of his experience and objective evidence regarding his experience.

**Reduction in Pain**

There is no question that some people can undergo seemingly painful experiences while hypnotized without feeling the intensity of pain typically associated with the experience. For example, some hypnosis has been used with some highly hypnotizable women to help them go through the experience of giving birth without the need for pain medication. Numerous other examples could be given of this phenomenon.

Is the successful use of hypnosis for the control of pain an exception to the general rule that “there is nothing that is performed under hypnosis that cannot be performed by motivated people without hypnosis”? The answer is no. In general, although hypnosis is
certainly an effective tool to help some people with the control of pain, it appears to be about as effective as a number of other techniques that have been developed to help take an individual’s mind off the source of his or her pain.
Theories of Hypnosis

There are two general categories of theories of hypnosis: dissociation theories and sociocognitive theories.

Dissociation Theory

According to dissociation theory, hypnosis represents a special altered state of awareness in which there consciousness is split into two components: a hypnotized component (the hypnotized self) and a non-hypnotized part (the hidden observer). The hidden observer maintains an accurate perception of the world, exerting its influence to maintain limits on the behaviors produced by the hypnotized self. For example, even while the hypnotized self is feeling very little pain, the hidden observer is accurately monitoring the pain, and will step in to take over control if the pain becomes too great.

In support of this view, your text describes an experiment in which the hypnotized subject puts one hand in ice cold water and is told to verbally report the amount of pain. The subject is also told, however, that the other hand should press a key at different rates to signal the intensity of the pain experienced by the hidden observer component of consciousness. In this study, subjects remained calm, and for an impressively long time reported feeling no pain at all, even while the hand controlled by the hidden observer was frantically pressing the key at a rapid rate! At some point, the hidden observer took over completely, and the subject suddenly reported the pain as being very intense.

Sociocognitive Theory

The premise of sociocognitive theory is that being a hypnotized subject is a social role. People voluntarily immerse themselves in this role, and like all social roles, the way people behave and even how they perceive events is influenced by their expectations and knowledge regarding the rules of this particular social role. Proponents of this approach point to two kinds of evidence in support of the theory. First, as you have learned already, there are no feats that are performed under hypnosis that cannot be performed by motivated people who are not hypnotized. Second, it is clear that expectations regarding the nature of hypnosis (expectations that the subject brings to the situation based upon prior knowledge, combined with information gleaned from the suggestions of the hypnotist during the hypnosis session itself) essentially determine what will be experienced under hypnosis. A good example of this phenomenon involves a comparison of the effects of hypnosis as practiced by Mesmer and the effects produced in hypnosis session today. Mesmer’s subjects expected to go into convulsions when they were mesmerized, and they did go into convulsions. Subjects today do not have that expectation; as a result, convulsions do not occur.

It is easy to read about this theory and think that the theory is proposing that when people are hypnotized they are just pretending to be hypnotized. That is not really accurate. As you will learn in the social psychology section of the course, when we immerse ourselves in a social role of any kind, our expectation regarding the rules of the role have
considerable influence on our behavior in a way that goes far beyond what happens when we simply “pretend” to be a person who has adopted that social role.

It is also important to note that even if one accepts sociocognitive theory, it remains the case that the “hypnotized” social role is a role with some very interesting characteristics, combining elements of (1) a handing over responsibility for one’s actions to another, (2) modifying one’s attributions regarding the control of one’s behavior (attributing the behaviors to the words of the hypnotist rather than to one’s own self control, much like a child who claims that he couldn’t stop himself from doing something because his friends told him to do it), and (3) maintaining a highly focused state of attention, much as we do when we are so immersed in an activity like working on a computer that we are only dimly aware of what is going on around us.

Which of these theories is correct? There remains no consensus of opinion, and many psychologists feel that a full explanation of the nature of hypnosis may require the acceptance of some elements of both the dissociation and the sociocognitive approaches.