

<p style="text-align: center;"><u>Consciousness</u></p> <ul style="list-style-type: none"><li>• How do psychologists define consciousness?</li><li>• American sleep patterns (National Sleep Survey of 2002)</li><li>• Do you get enough sleep survey</li><li>• Consequences of sleep deprivation</li><li>• The function of sleep</li><li>• Sleep and the brain</li><li>• Who is at risk of sleep deprivation? What are the possible consequences?</li><li>• Why is learning about the effects of sleep deprivation important?</li></ul>	<p style="text-align: center;"><u>Psychoactive drugs</u></p> <ul style="list-style-type: none"><li>• Categories of psychoactive drugs your textbook uses<ul style="list-style-type: none"><li>○ Depressants</li><li>○ Opiates</li><li>○ Stimulants</li><li>○ Psychedelic Drugs</li><li>○ Designer “club” drugs</li></ul></li><li>• Drug categories and neurotransmitters</li><li>• Drug tolerance, Withdrawal and compensatory response</li><li>• Alcohol and the brain</li></ul>
<p style="text-align: center;"><u>Hypnosis</u></p> <ul style="list-style-type: none"><li>• What are common beliefs about hypnosis?</li><li>• What can hypnosis do?</li><li>• What hypnosis cannot do.</li><li>• Factors related and unrelated to hypnotic susceptibility</li><li>• Theories of hypnosis<ul style="list-style-type: none"><li>○ Social-Cognitive Theory</li><li>○ Dissociation (or neo-dissociation) Theory</li></ul></li></ul>	

## Hypnosis

What do you believe about hypnosis?

- Can you be hypnotized to behave against one's own will?
- Can hypnosis produce “amazing feats” such as “the human plank”?



- Can hypnosis reduce pain?
- Can you induce hypnotic amnesia?
- Can you use hypnosis to enhance memory?

What does the scientific research indicate about these claims?

## Hypnosis

The following are true, but misleading statements about behaviors people can perform under hypnosis:

- People who are hypnotized can become rigid as a board. They can lie flat with only two chairs for support (one at the head, and one at the ankles).



- People who are hypnotized will throw water on another person when they are told or shown that it is acid (the acid was later switched without the hypnotized person's knowledge).

These are true, but misleading statements about hypnosis and cannot be used to support the claim extraordinary abilities that hypnosis can produce.

- What does each statement suggest?
- What information have you not been told about hypnosis?

## Hypnosis

What information have you not been told about hypnosis?

Many of the studies of hypnosis do not have a control group. If a control group of non-hypnotized participants can perform the same behaviors, then hypnosis isn't as amazing as some claim.

- This feat is easily accomplished without hypnosis—don't try it at home.



- Experiments done with a control group show that people in the control group who were not hypnotized would throw acid on someone else when asked to by the researcher—just like those under hypnosis.

Without this information from a general and diverse education, it is hard to tell what the omissions are. This occurs quite often in politics to persuade the public into a particular policy.

## What do psychologists know about hypnosis?

Hypnosis can help people:

- relax,
- feel less pain,
- and facilitate progress in therapy.

What hypnosis can do:

- **Hypnosis can help relieve pain.** This is helpful when chemical painkillers are not an option.
- **Hypnotic suggestions concerning sensations are the most effective.** Given the proper instructions, a hypnotized, a person can be made to smell a bottle of ammonia and respond as if it were perfume. It is also possible to alter color vision, hearing sensitivity, time sense, and perception of illusion.
- **Hypnosis coupled with cognitive-behavior therapy** enhances the effectiveness of weight-loss programs.

Hypnosis is more successful in changing subjective experience than changing behaviors such as smoking and eating.

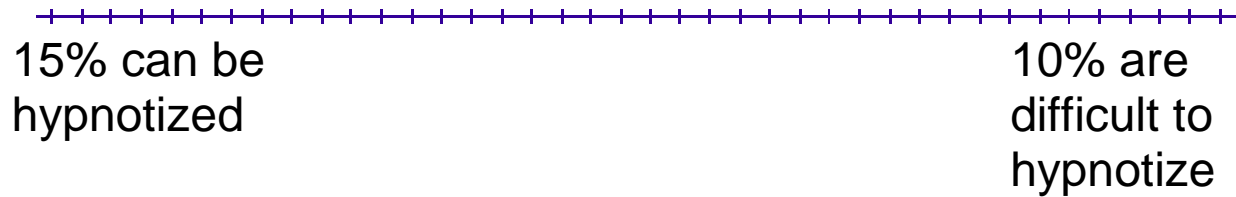
## **What hypnosis cannot do**

- You cannot be hypnotized against your will.
- You cannot be hypnotized to commit acts that are not congruent with your core beliefs and values (such as murder). However, just like people NOT under hypnosis, they can be coaxed and persuaded to commit acts that are not congruent their core values.
- **Behavioral:** Hypnosis has failed to produce long-term changes in cessation of smoking behavior.
- **Memories:**
  - Overall, hypnosis seems to increase the confidence a person has in their memories retrieved by hypnosis, regardless if they are accurate or not. More often, hypnosis leads one to recall more false memories (pseudomemories) than enhance their memories—especially with leading questions.
  - A person told not to remember something heard during hypnosis may claim not to remember. In some instances, this may be nothing more than a deliberate attempt to avoid thinking about specific ideas. However, a **brief** memory loss does seem to occur.
- **Strength:** Hypnosis has no more effect on physical strength than instructions that encourage a person to make his/her best effort.
- **Age regression:** When a person is asked to “regress” to a previous age, it appears on the surface that they are able to do so. However, most theorists suggest that “age-regressed” subjects are only role-playing.

- They are unable to “see” the world from a 3-year olds height, or identify the emperor of Japan (if regressed to a 1942 Japanese fighter pilot).

## Factors Related and Unrelated to Susceptibility to Hypnosis

Approximately 15% of the general population can be hypnotized and 10% of the general population are difficult and virtually impossible to hypnotize.



Several studies have shown that susceptibility to hypnosis is UNRELATED to personality characteristics such as:

- gullibility,
- hysteria,
- psychopathology,
- trust,
- aggressiveness,
- submissiveness,
- imagination or
- social compliance

People who are highly hypnotizable and difficult to hypnotize have the same rates of these characteristics.

Susceptibility to hypnosis, however has been linked with an individuals' ability to become absorbed in activities such as

- reading
- listening to music or
- daydreaming



For more information on-line about hypnosis, read the following article from Scientific American that can be found on-line:

- Nash, Michael, R. (2001), The Truth and The Hype about Hypnosis, Scientific American, July 2001, url: <http://www.sciam.com/2001/0701issue/0701nash.html>.
- What do you really know about hypnosis section from the above article: url: <http://www.sciam.com/2001/0701issue/0701nashbox3.html>

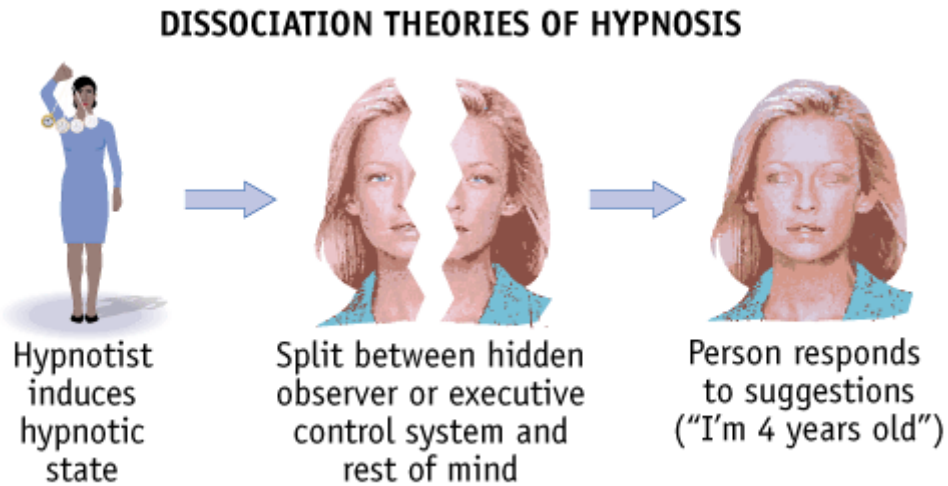
What seems to be more amazing than the amazing things hypnosis cannot produce is that 47% of therapists interviewed would have greater confidence in details recalled from hypnosis. Hypnotic effects can be useful, but seldom amazing.

Why do many people believe that hypnosis can produce many effects (such as those listed above), when it cannot?

- Like with many pseudoscientific claims, you are given partial information.
- Television often incorrectly portrays hypnosis (the real story isn't that exciting or sensational to draw an audience).

## Explaining Hypnosis

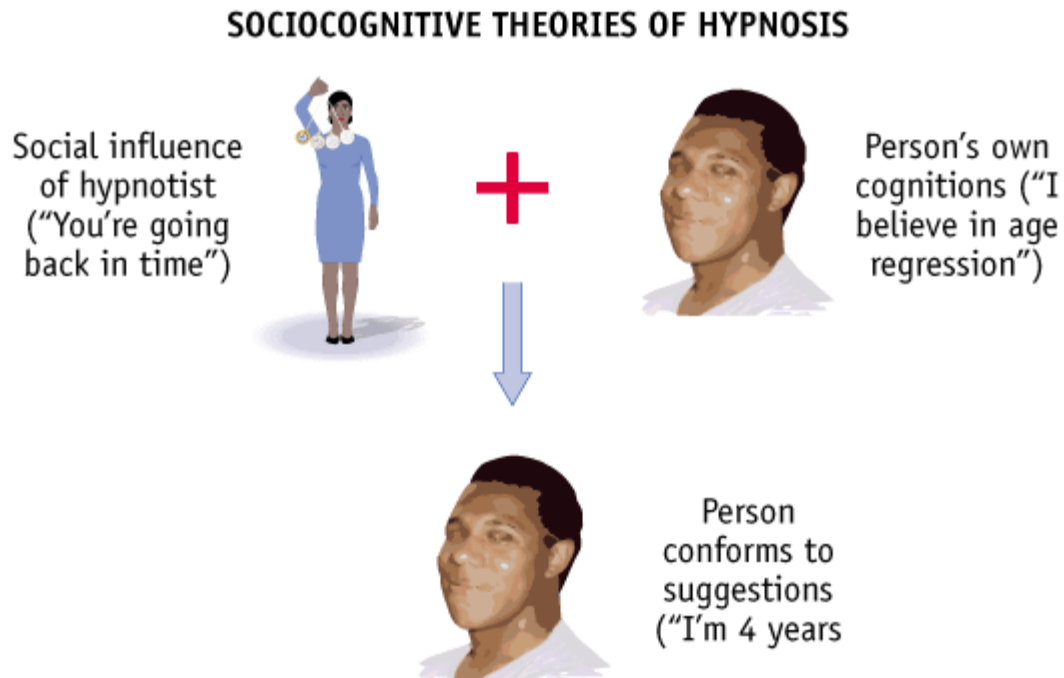
Dissociation Theories: Hypnosis is an altered state involving a division (dissociation) of consciousness.



There are two streams of consciousness (awareness) that are cut off from each other. One stream responds to the hypnotist's suggestions, and the other remains in the background aware of everything that goes on.

## Explaining Hypnosis

Social-Cognitive theories: Hypnotic experiences result from expectations of people who are motivated to take on the role of being hypnotized.



Eg. most people believe that hypnosis involves a trance-like state and responsiveness to suggestions. People highly motivated to conform to role develop a perceptual set and respond accordingly.