

**Definitions of Hypnosis
Historical Perspectives
Myths and Misperceptions
Hypnotizability
and
Hypnotic Phenomena**

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Objectives

- Provide a definition of hypnosis related to relevant scientific research.
- Outline major historical events in hypnosis and mesmerism.
- Dispel myths and misperceptions concerning hypnosis
- Describe common hypnotic phenomena

**Hypnosis is the art of
securing a patient's attention
and then effectively
communicating ideas that
enhance motivation and
change perspective.**

Cory Hammond

Hypnotist: An Imagination Coach

**Hypnosis alters the
process of perception.**

“Believing is seeing”

David Spiegel

**Hypnosis is applied
imagination used to some
constructive end.**

Donald Lynch

Hypnosis is about learning what
you didn't know you knew and
controlling what you didn't know
you could ... Using your mind ..
Daydreaming on purpose ...
Thinking to help yourself ...
Learning how to work to control
your mind

Hypnosis uses focused attention and suggestion to produce changes in perception, memory and behavior.

**Trance is whatever the
patient says it is.**

Wester

Definition of Hypnosis

- Hypnosis is an altered state of awareness, usually but not always involving relaxation in which the individual develops heightened concentration on a particular image or idea for the purpose of maximizing potential or achieving some specific goal.

APA Division 30 Definition

“.....When using hypnosis, one person (subject) is guided by another (hypnotist) to respond to suggestions for changes in subjective experience, alterations in perception, sensation, emotion, thought or behavior. Persons can also learn self-hypnosis, which is the act of administering hypnotic procedures on one’s own.....”

**Hypnosis involves the
absorption of the child into an
altered state of consciousness in
the service of creating a
therapeutic change in
perception, emotion, behavior
or experience.**

Kuttner

The greatest discovery of my generation is that human beings, by changing the inner attitude of their minds, can change the outer aspects of their lives.

William James

Three Types of Hypnosis

- Spontaneous Hypnosis
- Hetero-hypnosis
- Self-Hypnosis

Components of Hypnosis

- Focused attention, absorption
- Dissociation, distortion, distraction
- Suggestibility and generalization

Typical Hypnosis Session

- Induction
- Deepening
- Trancework
 - Suggestions
 - Post-Hypnotic Suggestions
 - Ego-strengthening
- Re-Alerting and Reflection

Suggestion:

**A highly refined technique
of communication.**

Suggestion:

The use of words or description to access imagination and direct it to some constructive end.

Post-Hypnotic Suggestion

Suggestions given for responses to occur after hypnosis has been terminated.

Common characteristics of focused attention

- Cognitive shifts
- Memory shifts
- Archaic modes of thinking – primary process
(de-personalization, de-realization)
- Reduction in ANS activity

Alpha & Theta State Theories

- Four major brain wave patterns
 - Beta – alert / working
 - Alpha – relaxed / reflecting
 - Theta – drowsy
 - Delta – sleeping / dreaming / deep sleep

The Alpha and Theta State Theory defines hypnosis states with the EEG level necessary to perform the task of clinical hypnosis

- Alpha State
 - Relaxing and daydreaming
 - Smoking cessation, weight management, reduction of phobias, enhancing sports performance
- Theta State
 - Required for therapeutic change, hypnosis for surgery, hypnoanesthesia and hypnoanalgesia

Hyper-suggestibility Theory

- Subject focuses attention by responding to the suggestion of the hypnotist
- Concentration filters out what is unimportant and magnifies what is important
- Hypnotist's words are accepted without conscious censorship
- Selective thinking replaces conventional judgment making

Informational Theory

- Applies the brain as computer model
- Optimum functioning results when a system adjusts its feedback networks to increase the signal to noise ratio – called “steady state”
- Hypnotist uses techniques to reduce the interference and increase receptability of specific messages

Systems Theory

- Involves the process of greatly enhancing or depressing the interacting subsystems of the nervous system
- Feed-back loops an essential component

Structural Theory

- PET scans and fMRI have been used to show how hypnotic influence is exerted through the executive control system to coordinate how information to the level of awareness is handled

Neurobiology of Hypnosis

- Right sided brain activity increases with hypnosis (in high hypnotizables)
- Left hemisphere is inhibited during hypnosis
- Depth of inhibition of left hemisphere correlates with depth of hypnosis

Neurobiology of hypnosis

- PET scans have shown:
 - Hypnosis increases cerebral blood flow to anterior cingulate sulcus
 - Hypnosis decreases cerebral blood flow to posterior cingulate gyrus

Neurobiology of Hypnosis

- Amygdala handles fear and anxiety and projects directly into anterior cingulate
- Amygdala can not distinguish between what is real and what is imagined
- If in hypnosis you can turn off central nucleus of amygdala, you can turn off fear

Neurobiology of hypnosis

- Hypnosis activates the cingulate cortex
- Sensory input goes through the thalamus to cingulate to hippocampus where context of message is recorded.
- Pain, both unpleasantness and intensity is mediated in the cingulate
 - Unpleasantness – anterior cingulate gyrus
 - Intensity – posterior cingulate gyrus

“At least for highly suggestible people, words framed as part of a carefully crafted suggestion can change focal brain activity in a way no drug we have can do.”

Amir Raz and the Stroop Effect

Definitions

- Trance – a naturally occurring state of altered consciousness when the individual is absorbed in the internal experience
- Induction – focusing or narrowing of attentional focus
- Deepening – increasing the depth of the trance state
- Fractionation – coming partially out of trance and then going back in at deeper level

Definitions

Trance Phenomenon – the cognitive, sensory and ideodynamic effects that can happen in trance

Trance Ratification – using trance phenomenon to convince the patient that something different is occurring

Trancework – the therapy in trance

Utilization – using what the patient brings (interests, needs, etc) to individualize the

History of Hypnosis

- Prehistoric / Indigenous Peoples
 - Shamans, Medicine Men, Mystics
- Egyptians
 - Sleep Temples
- Greeks
 - Delphic Oracles, Aesculpian rituals

**The natural force within
each of us is that greatest
healer of all.**

Hippocrates

The power to see does not come from the eye, the power to hear does not come from the ear, nor the power to feel from the nerves; but it is the spirit of man that sees through the eyes, hears through the ears and feels by means of the nerves. Wisdom and reason and thought are not contained in the brain, but belong to the invisible and universal spirit which feels through the heart and thinks through the brain.

Paracelsus
1493-1541

History of Hypnosis

- Mesmer
 - 1734-1815
 - Animal magnetism
 - Importance of rapport
 - Mesmerism

History of Hypnosis

- John Elliotson
 - Respected surgeon and inventor of the stethoscope
 - Censored in The Lancet
 - Called a quack & a charlatan
- James Braid
 - Coined the term hypnosis after the Greek god of sleep
 - Recognized subject's susceptibility to suggestion

History of Hypnosis

- James Esdaille
 - Scottish surgeon in India
 - Studied mesmerism
 - Reduced mortality rate from 50% to 5%

History of Hypnosis

- Charcot (1825-1893)
 - Chief of neurology at Salpêtrière, Paris – an insane asylum
 - Opposed School of Nancy
 - Believed hypnosis was hysteria
 - Believed hypnosis was dangerous

**“But since the medicine
of conviction and
imagination cures, why
do we not use it?”**

D’Eslon

History of Hypnosis

- Sigmund Freud (1856-1939)
 - Inability to incorporate hypnosis into his own practice
 - Cures were temporary because he couldn't hypnotize patients to sufficient depths
 - Wanted to consciously uncover repressed material rather than through the unconscious

History of Hypnosis

- Milton Erickson (1902-1980)
 - Psychiatrist who brought hypnosis back in to the therapeutic realm
 - Naturalistic approach
 - Teaching Tales

History of Hypnosis

- 1949 Society for Clinical and Experimental Hypnosis established
- 1955 British Medical Society endorses hypnosis
- 1957 Founding of the American Society of Clinical Hypnosis

History of Hypnosis

- 1958 AMA recognizes hypnosis and recommends that it be taught in all medical and dental schools
- 1961 APA recognizes hypnosis as an acceptable therapeutic adjunct

“All truth passes through three
stages:
first it is ridiculed,
second it is violently opposed,
and
third it is accepted as self-
evident.”

Arthur Schopenhauer
19th century Philosopher

Themes in Hypnosis History

- Among oldest of therapeutic interventions
- Alternating times of acceptance / rejection
- Parallels evolution of psychophysiology
- From symptom removal to self-actualization

Healing consists only in....allowing ,
causing or bringing to bear those
things or forces for getting better
(whatever they may be) that already
exist in the patient.

Cassel, The Nature of Suffering and the Goals of Medicine

“It is possible to create a very grave disease by acting on the vital principal of the imagination and to cure it the same way.”

**Dr. Samuel Hahnemann
Organon of Medicine, 1842**

Hypnosis may not cure the disease, but it can have a profound impact on the illness.

Myths and Misconceptions

- **The hypnotist has special powers**
- **Hypnosis is a state of sleep or unconsciousness**
 - “What if I don’t wake up?”
- **The subject relinquishes control and would do something that they wouldn’t ordinarily do**
 - “What if I don’t want to do something you tell me to do?”
- **Something is done to the patient or projected onto the patient**
 - “Will I embarrass myself?”

More Myths

- **Only weak, gullible people can be hypnotized**
 - “If I can be hypnotized does it mean I am a wimp?”
- **Hypnosis occurs only when the therapist decides to use it.**
 - “I heard everything you said, I must not have been in trance
- **Hypnosis is therapy**
 - “Am I going to remember something forgotten from my past?”
- **If hypnosis helps to give up a behavior, a new problem will develop somewhere else**
 - “If I quit smoking with hypnosis, is it going to make me gain 30 pounds?”

Imaginative or hypnotic talent is the innate ability of an individual to respond to and use the power of imagination.

Characteristics of Hypnotizability

- Enjoy reading
- Enjoy dramatic arts
- Religion of personal commitment
- Severe early childhood punishment
- Ease of dissociation
- Sense of adventure

Biological Characteristics of High Hypnotizability

- Volume of the anterior corpus callosum 31.8% greater in high hypnotizables than in low

Hypnotizability

- COMT gene – individuals heterozygous for this gene are more hypnotizable
- Genes that control neurotransmission differ between low and high hypnotizables

Developmental Traits of Children that Enhance Hypnotic Ability

- Absorption / Dissociation
- Eidetic Imagery
- Magical Thinking / Limited Reality Testing
- Intense
- Enjoy New Ideas and Experiences
- Interested in Self-mastery

Sugarman

Neurobiology of Hypnosis

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Neurobiology of hypnosis

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THETA

- High band theta is related to hypnotizability
- Theta power increases as people go into hypnosis
- Theta is prominent in the frontal cortex and especially anterior cingulate cortex
- Theta reflects massive cortical inhibition
- Executive and choice functions shut down

The Mind/Body Connection

- Every change in the physiologic state is accompanied by an appropriate change in the mental-emotional state, conscious or unconscious, and conversely, every change in the mental-emotional state is accompanied by an appropriate change in the physiological state.
- **Green, Green and Walters**

The Placebo Response
is the keystone of
understanding mind-body
communication and
imagination is its chief ally.

Whether the object of your faith is
real or false, you will
nevertheless obtain the same
effects.

Paracelsus

Placebo Response

Allopathic Medicine discounts the importance of the placebo effect.

Mind-body-spirit medicine embraces it.

In a motivated, highly hypnotizable individual, hypnosis can maximally utilize the placebo effect, capitalizing on the true individual's capacity to respond to what is believed and accepted as true.

McGlasham

Hypnotic Phenomenon

- Rapport
- Ideosensory Activity
- Ideomotor Activity
- Dissociation
- Depersonalization
- Time Distortion

Hypnotic Phenomenon

- Catalepsy
- Induced Dreams
- Hallucinations
- Memory Modification
- Age Pro/Regression
- Somnambulism