SCEH 2024 Annual Conference

Scientific Program Schedule

Scientific Program   11.25 CE/CME

The Scientific Program covers empirical issues in hypnosis research and practice and related areas, featuring Keynotes, Research Presentations, Symposia, and a Poster Session.

Cohort session – must attend all three days (Wednesday - Friday) to earn CE/CME credits. Agenda subject to change.

Co-chairs: *Deanna Denman, PhD and Jessie (Kittle) Markovits, MD*

Faculty: *Cameron Alldredge, PhD; Jon K. Amundson, MA, MAPP, PhD; Zsuzsanna Besnyo, BA; Gary Elkins, PhD, ABPP, ABPH; Yeganeh Farahzadi, MS; Claire Green, BS; Victor Padilla, MS; Zoltan Kekecs, PhD; Mathieu Landry, PhD; Barbara McCann, PhD; Merranda McLaughlin, MS; Vanessa Muniz, BS; Victor Padilla, ScM; Olafur Palsson, PsyD; Nicola Park, MD; David Patterson, PhD, ABPP; Aman Raturi, MA; Katherine Scheffrahn, BS; David . Spiegel, MD; Meredith Vagner; Michael D. Yapko, PhD, and Azadeh Zandi, MA*

Scientific Program Overview

The Scientific Program features keynotes, research presentations or symposia that address empirical issues in hypnosis research and practice and related areas. Research presentations shine the light on novel empirically based findings, including experimental studies, case reports, clinical trials, meta-analyses, and systematic reviews. Symposia bring together top-notch researchers as they critically discuss empirical findings pertaining to a specific theme of relevance to the hypnosis community. Many symposia integrate research and practice or draw upon research in psychology, psychiatry, or neuroscience to highlight issues that improve our understanding of hypnosis. Our Poster Session provides another glimpse into the latest research in the field.

Saturday, Oct. 26, 2024

8:30 -9:30 AM   1.0 CE/CME

Keynote

Tranceformation: Hypnosis in Mind, Brain, Body, and Apps

David Spiegel, MD, Willson Professor & Associate Chair of Psychiatry and Behavioral Sciences, Stanford University School of Medicine, Palo Alto, CA

Hypnosis was the first Western conceptualization of psychotherapy, yet it remains underutilized, misunderstood, and disrespected as it was during its early years in the late 18th Century in France, where it was dismissed as "nothing but heated imagination". I will review recent developments in our understanding of the neural basis of hypnosis, which illuminates how it works to mobilize natural aspects of brain function to enhance motivation and ability to change. Hypnosis involves highly focused attention, coupled with dissociation of aspects of awareness, an increase in cognitive flexibility, and an enhanced ability to modulate perception". Considerable evidence has emerged regarding underlying brain mechanisms, including studies employing event-related potentials, PET and fMRI. Our recent resting state fMRI data demonstrate functional connectivity between the executive control and salience networks among high but not low hypnotizable individuals. The hypnotic state involves reduced activity in the dorsal anterior cingulate cortex (key region in the salience network), heightened functional connectivity between the left dorsolateral prefrontal cortex (executive control network) and the insula, and inverse functional connectivity between the left DLPFC and the posterior cingulate cortex, part of the default mode network. The hypnotic ability to modulate perception has clear clinical application, especially in pain and anxiety control. Randomized clinical trials that we have conducted demonstrate the efficacy of hypnosis in reducing pain, anxiety, somatic complications, and procedure duration during radiological interventions. It has been shown to reduce pain for women with metastatic breast cancer by 50% over the course of a year on similar analgesic medication regimens to those of controls. Despite this progress in understanding the neural basis of hypnosis, it remains drastically underutilized. For example, some 500,000 Americans have died of opioid overdoses in the past decade, while hypnotic analgesia has been largely ignored. People tend to view hypnosis as either useless or dangerous. It is really dangerously effective. We have decided to make hypnosis as widely available as possible by developing a digital interactive hypnosis app, Reveri, downloadable from www.Reveri.com, the App Store and Google Play, with automated programs for testing hypnotizability, and learning how to better cope with stress, focus, pain, insomnia, eating, drinking, and smoking problems. We have had some 900,000 downloads from 130 countries. Other excellent hypnosis apps such as Oneleaf in France and Nerva in Australia, have also been developed. The time has indeed come to liberate hypnosis from the prison of misunderstanding in which it has languished and widely disseminate its proven benefits.

Learning Objectives

1) Describe revisions to the definition of hypnosis involving cognitive flexibility rather than suggestibility.
2) Describe the brain basis of hypnosis and how it explains the definition revision and the usefulness of app-based hypnosis.
3) Describe the use of the suspension of regular self-awareness in hypnosis and how it facilitates remote app-based psychotherapy with hypnosis.
4) Describe the app-based availability of hypnosis for widespread dissemination – opportunities and results.

9:30 - 10:00 AM   0.5 CE/CME

Technology Spotlight 1

Reliability and Validity of a New, Remotely Delivered Hypnotizability Scale

Vanessa Muniz, BS; Cameron T. Alldredge, PhD; and Gary Elkins, PhD, ABPP, ABPH, Baylor University, Waco, Texas, USA

The prevalence of hot flashes among postmenopausal women is a significant concern, often complicated by the adverse effects of traditional treatments like hormone therapy. This scoping review aims to evaluate the effectiveness of cognitive behavioral therapy (CBT) and clinical hypnosis in addressing hot flashes. We conducted a thorough search on PubMed, Web of Science, and PsycINFO for peer-reviewed studies in English focusing on CBT or clinical hypnosis for women aged 18 years and above. After meticulous screening following PRISMA guidelines for scoping reviews, 23 studies were included in this study. While CBT showed promise in alleviating stress associated with hot flashes, only studies investigating clinical hypnosis demonstrated noteworthy reductions in both frequency and severity of hot flashes. Clinical hypnosis emerged as a more effective treatment modality, surpassing CBT by a considerable margin, as evidenced by the current literature. While both approaches effectively address psychological distress, clinical hypnosis stands out for its ability to reduce severity and frequency of hot flashes and shows clinical significance. This review discusses limitations and suggestions of future research directions for CBT and clinical hypnosis in managing hot flashes.

Learning Objectives

1) Articulate a comprehensive synthesis of the primary literature concerning the efficacy of Cognitive Behavioral Therapy (CBT) and clinical hypnosis as treatments for hot flashes.

10:00 – 10:15 AM

Break

10:15 AM - 12:00 PM   1.75 CE/CME

Research Presentations 1: Hypnosis, Mind, and Body

Hyp1 - In the Clue of Your Steps- The Phenomenology of Active-Alert Hypnosis and Passionate Dance

Zsuzsanna Besnyo, BA and Katalin Varga PhD, DSc, Professor, Head of Department of Affective Psychology, Eotvos Lorand University Budapest, Hungary

I would like to introduce a quasy-formalised dance method (Groove). How can it induce altered state of consciousness, why is it so special for scientific reasons in 2024? I used the Phenomenology of Consciousness Inventory (Pekala, R.J. 1986) with 25 participants and I compared the state of consciousness of them with the active-alert database from ELTE Affective Psychology Department.The specialty of this project is the ethical aspect of a double point of view: my full involvement personally and scientifically. I don't examine the previous experience in dancing because the professionalism or the issue of expression doesn't affect the involvement. Everybody focusses on themselves, walk through their body. There isn't intentional physical contact, the members stay abstract and move like a sovereign person. The exercise is related to and act on the symbolical, associative, subconscious communication, the archaism of tribal dance and it is parallel to the beginner and intuitive inductive techniques. The alternative inductive techniques make stronger alter state of consciousness (Varga, GÅ'sinÃ© Greguss 2012 p.119.). According to my results the active-alert and the Groove group do not differ in multiple key aspects. I will demonstrate the potential reasons of it and the therapeutic potentials.

Learning Objectives

1) Describe the difference between two active inductive techniques: Groove dance and active-alert hypnosis.

Hyp2 - Word Blindness Effect: Do non-hypnotic suggestions work better than hypnosis ? - A systematic review & Meta-analysis

Aman Raturi, MA, University of Delhi, Delhi, India and S.P.K. Jena, PhD, Department of Applied Psychology, South Campus, University of Delhi, Delhi, India

Word Blindness Effect refers to a temporary inability to recognize written words, despite having normal reading ability, following a post hypnotic suggestion. Studies have explored impact of suggestion on this effect, aiming to understand how effective suggestion is modulating this phenomenon. This systematic review and meta-analysis rigorously examine the Word Blindness Effect, with a particular focus on the distinct influence of Post-Hypnotic Suggestion versus Non-Hypnotic Suggestion. Relevant English-language studies spanning database inception to January 2023 from PubMed, Web of Science, PsycINFO, Scopus, and ScienceDirect were thoroughly examined. The JBI appraisal checklist assessed study quality, and potential publication biases were analysed. Subgroup analyses and effect size estimation using Hedges' g under a random effects model were conducted. The review comprised 19 studies, with 14 exploring Post-Hypnotic Suggestion's effect on Stroop Interference Effect (SIE) and six investigating suggestion effects on accuracy. Results unveiled significant overall effects of suggestion on cognitive performance, evidenced in both SIE and accuracy. Subgroup analyses underscored differential impacts based on suggestion types. The observation of reduced heterogeneity in our subgroup analysis, which was based on the type of suggestions given, offers valuable insights. Specifically, it suggests that studies utilizing non-hypnotic suggestions showed more consistent results compared to those employing hypnotic suggestions.

Learning Objectives

1) Describe and challenge the notion that the influence of suggestions is solely dependent on hypnosis
2) Describe the broader applicability of suggestion-based interventions.

Hyp3 - Nerva, a Mobile-Application of Gut-Directed Hypnotherapy for Irritable Bowel Syndrome: User Characteristics, Patterns of Use, and Predictors

Lauren Simicich, PhD; Vanessa Muniz, BS; Katherine Scheffrahn, BS; Gary Elkins, PhD, ABPP, ABPH, Baylor University, Waco, Texas, USA

Hypnotic intervention for irritable bowel syndrome (IBS), or gut-directed hypnotherapy (GDH), is an effective treatment for improving IBS symptoms with minimal burden and risk. However, there is a lack of broad accessibility to GDH. The Nerva app shows promise for dissemination and implementation of evidence-based GDH intervention for IBS. This study aimed to describe the demographic and clinical characteristics of Nerva app users, examine usage patterns, and explore potential factors associated with Nerva app usage. A retrospective analysis was conducted of data

from 14,898 individuals who downloaded and used the Nerva app between January 2022 and September 2022. Descriptive statistics and Chi-square tests of independence were calculated to examine demographic/clinical characteristics, usage patterns, and their associations to program persistence. Simple linear regression models were used for correlations of GI symptoms severity scores to user persistence. Thirty-one percent of users persisted with the program. A small statistically significant association was found between Nerva app program persistence and age, Ï‡2 (6, N = 6745) = 164.82, P< .001, V = .16. This study found promising adherence rates for the Nerva app program within the first six weeks of use. Significant associations were found between user/clinical characteristics and Nerva app program persistence.

Learning Objectives

1) Describe data about user characteristics, patterns of use, and factors of engagement of a mobile application delivery of GDH for individuals with IBS.

Hyp4 - Subconscious Connectedness: A Recently Identified Hypnosis-Related Personality Super-Trait That Provides a Broader Context for Hypnotizability and Hypnosis

Olafur Palsson, PsyD, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, United States

Research over several decades has shown hypnotizability to be correlated with a range of other stable personal characteristics. The implications have received relatively little attention, and hypnotizability is often seen as a relatively isolated trait mostly of relevance to hypnosis and suggestibility. However, a recently identified broad personality trait, subconscious connectedness (SC), unites hypnotizability and its various correlated characteristics into a meaningful broader whole. Subconscious connectedness can be defined as each person's overall degree of capacity (or "bandwidth" for communication between conscious and non-conscious mental functions in everyday life. Measured on the validated Thought Impact Scale, it has been tested in seven studies involving 9000+ participants. It correlates most strongly with absorption (r=.70), but also robustly with dissociation, fantasy-proneness, emotional empathy, magical thinking, artistic/creative activities, and anomalous experiences. Although SC correlates modestly (r=.33) with hypnotizability, its emerging hypnosis research importance is highlighted by substantial correlations with people's ability to experience classic hypnosis-related phenomena in hypnosis (effortless automaticity, vivid visual imagery, altered body perception) and its role in driving hypnotherapy-seeking. This presentation will provide overview of SC, how it delineates a constellation of diverse human psychological capabilities of which hypnotizability is but one star, and its potential value in hypnosis research.

Learning Objectives

1) List at least three typical psychological or behavioral characteristics of people who score high on subconscious connectedness.

Hyp5 - Clinical Hypnosis and Cognitive Behavioral Therapy for Hot Flashes: Findings from a Scoping Review

Vanessa Muniz, BS; Victor Julian Padilla, MS; Cameron T. Alldredge, PhD; and Gary Elkins, PhD, ABPP, ABPH, Baylor University, Waco, Texas USA

Hypnotizability assessment plays a crucial role in understanding and implementing hypnotherapy interventions effectively. This presentation introduces a novel hypnotizability assessment scale, the Brief Remote Elkins Alldredge Test of Hypnotizability (BREATH), developed to provide a brief, remote, and electronic method for assessing hypnotizability. This scale was created based on the gold standard of hypnotizability scales, the Elkins Hypnotizability Scale (EHS). Previous literature has demonstrated that the EHS has strong reliability and validity data in general adult and clinical populations. Building upon this foundation, the primary objective of this study was to evaluate the reliability and validity of BREATH as a brief and remote measure of hypnotizability. As well as to explore potential correlations between hypnotizability and variables such as empathy, strength of religious faith, and cognitive expectancy, as suggested by prior research. We will provide an introduction to the BREATH and findings on the reliability and validity, as well as its possible associations with relevant variables will be discussed. This research contributes to advancing the understanding and application of hypnotizability assessment in clinical and research settings.

Learning Objectives

1) Describe data on the reliability, acceptability, and validity of a new, brief hypnotizability scale

12:00 – 1:30 PM

Lunch on your own

OR

Member Meeting & Luncheon for SCEH current or prospective members

1:30 - 3:00 PM   1.5 CE/CME

Research Presentations 2: Pain and Hypnosis

Pain1 - Efficacy of hypnosis in pain control before and after orthopedic surgery in adults

Azadeh Zandi, MA, Eotvos Lorand University, Budapest, , Hungary

Hypnosis has emerged as a promising intervention for pain management across various medical contexts. There is also growing evidence in support of the effectiveness of various non-pharmacological interventions such as hypnosis used in ortphopedic surgery. Mind-body interventions in orthopedic surgery usually target pain, stress, and health-related quality of life. Although these interventions seem effective, the precise mechanisms underlying its efficacy remain unclear. This systematic review aims to explore the impact of hypnosis-based interventions on pre- and post-orthopedic surgery, as well as to show the diverse approaches employed in this domain. The review is based on systematic searches conducted in multiple databases including PubMed, EMBASE, PsycINFO, CINAHL, Dissertations and Thesis database, and the International Clinical Trials Registry Platform (ICTRP). Eligible studies employ hypnosis to alleviate pain in orthopedic surgery contexts. Specifically, our focus is on assessing the effect of hypnosis on postoperative pain intensity over time, alongside secondary outcomes such as postoperative anxiety and quality of life.As an ongoing project, the results of this study will be presented at a forthcoming conference. We think that our findings will contribute to a better understanding of the utility of hypnosis-based interventions in orthopedic procedures.

Learning Objectives

1) Explain and analyze efficacy of hypnosis in pain control before and after orthopedic surgery

Pain2 - Synchronicity in Pain Management Through the Lens of Biofeedback and Hypnosis

Zsuzsanna Besnyo, BA; Zoltan Kekecs PhD, Assistant Professor, Institute of Psychology, Head of the Behavioural Medicine and Research Credibility Laboratory, Eotvos Lorand University; Katalin Varga PhD, DSc, Professor, Head of Department of Affective Psychology, ELTE Eotvos Lorand University, Budapest, Hungary

In my study I intended to explore the reality of synchronicity between the hypnotist and the participants during cold pressor task. My goal to measure sensory perception during suggestions and two hypnosis sessions with hypnotizability measuring after that. How can participants manage and elaborate pain? How would this manifesting in their electro dermal activity (EDA)? On the

historical and stabile theoretical, empirical base of this department interactional synchronicity measuring (research of Eva Banyai and Kata Varga) I have a deep interest to understand how two individuals can make strong connections during hypnosis and how can a hypnotist reach another person intuitively, scientifically and "facilitate" them to manage their acute pain in this experiment.The dual EDA measuring made an interesting base to understand this vegetative, sensory explicit and implicit connection as well beat by beat. I would like to demonstrate the relationship between pain management techniques and hypnotic susceptibility. The study also looks for strategies that the participants use to induce hypnoanalgesia and assess the factors associated with the strategies which yield to the individual phenomenological field. I would like to underline the scientific, methodological and ethical spice of this study.Data analysis is ongoing yet.

Learning Objectives

1) Describe electrodermal activity based hypnotizability measuring and how other laboratories could adapt our unique ice pressor task.

Pain3 - Combining virtual reality and hypnosis in pain management: A mixed co-construction study with chronic pain patients.

David Ogez, PhD, Alexandra Chevestrier-Lefeuvre, Student, Msc Pharmacy:, Floriane Rousseaux, Post-doctorate, Psychology; Jade Varonneau, Student, Msc Psychology, Centre de recherche Hopital Maisonneuve-Rosemont, Montreal, Quebec, Canada

Objective: Evaluation of a combined virtual reality and hypnosis (VRH) intervention through a mixed-method study, integrating quantitative and qualitative approaches with patients, aiming at its integration into chronic pain management.Methods: A study involving 16 patients was conducted across 4 stages:

1- completion of questionnaires on pain, anxiety, and relaxation pre-VRH,
2- VRH usage with a psychologist assistant,
3- completion of satisfaction, user experience, cybersickness, pain, anxiety, and relaxation questionnaires post-VRH, and
4- participation in semi-structured interviews documenting VRH benefits, drawbacks, and improvement suggestions.

Data analysis was descriptive, comparing questionnaire scores with theoretical averages for satisfaction and pre-post intervention for pain, anxiety, and relaxation. Interview verbatims were qualitatively analyzed using QDA Miner, employing an iterative coding process to detail each participant's experience. Reliability measures were implemented to ensure analysis integrity.Results: Findings indicated reduced pain, anxiety, and relaxation scores post-intervention. They also assessed VRH satisfaction and user experience; participants' views on home use relevance; potential adverse effects; tool's added value on pain, anxiety, and

relaxation; and provided recommendations for optimizing home utilization.Conclusion: This study contributed to evaluating VRH effects on participants' well-being and pain, offering recommendations for enhancing VRH application in anticipation of home implementation.

Learning Objectives

1) Describe and co-construct co-construction of an RVH intervention program with patients with chronic pain.

Pain4 - Eight Modules for Psychotherapy for Chronic Pain Informed by Hypnosis and Mindfulness

David Patterson, PhD, ABPP, University of Washington, Seattle, Washington, United States

This 20 minute presentation will provide the theoretical and scientific basis for an eight-module psychotherapy approach to chronic pain management that is informed by hypnosis and mindfulness. The modules include assessment, motivational interviewing, mindfulness, cognitions about pain, hypnosis, monitoring activity, and psychological issues (e.g., depression, anxiety, PTSD, grief and sleep). The core of treatment will be a biopsychosocial assessment. For each module, the presenter will describe the science that is involved with treatment. The presenter will present research that he has help publish with colleagues on the combination of cognitive restructuring and hypnosis, as well as a comparison between education, hypnosis, and meditation for chronic pain in a sample of VA veterans. The approach described in detailed in Clinical Hypnosis for Pain Control (2nd edition) by DR Patterson and ME Mendoza, to be published in Fall, 2024

Learning Objectives

1) Describe eight modules of psychotherapy for chronic pain that is informed by hypnosis and mindfulness.

3:00 – 3:15 PM

Break

3:15 PM - 3:45 PM   0.5 CE/CME

Research Spotlight 1

Self-Administered Hypnosis for Hot Flashes: Preliminary Findings and Implications for Clinical Practice

Gary Elkins, PhD, ABPP, ABPH, Cameron Alldredge, PhD; Grant Morgan, PhD, and Vanessa Muniz, BA, Baylor University, Waco, Texas, USA

Hot flashes negatively impact 80% or more of the female population experiencing menopause due to aging and/or diagnosis and treatment for breast cancer, causing decreases in both emotional and physical role functioning. The most effective treatment for hot flashes, estrogen based treatment, is either contraindicated or a cause for worry amongst many women due to cancer and serious side effect risks. Effective, non-hormonal treatments for hot flashes that are not associated with unwanted side effects and are accessible to all women are needed. Hypnotherapy is the only psychological treatment that has demonstrated the ability to reduce hot flashes to a clinically significant amount in women experiencing menopause from natural aging as well as breast cancer treatment. However, access to this effective treatment is limited. This study reports preliminary findings from a randomized controlled trial comparing self-administered hypnosis to a white noise condition. All participants received information about hot flashes and supportive remote contact. Participants completed daily hot flash diaries and ratings of acceptability and quality of life. Preliminary findings suggest the self-administered hypnosis practice resulted in significant reduction in hot flashes. Findings are discussed in regard to implications for future research and potential mechanisms.

Learning Objectives

1) Discuss research evidence for hypnotherapy in reducing hot flashes in menopause.

3:45 - 4:45 PM   1 .0 CE/CME

Keynote

Process-Oriented Hypnosis: Expanding Targets of Treatment

Michael D. Yapko, PhD. Private practice, Fallbrook, CA

"You're unique…just like everyone else." This statement highlights a challenging conundrum: if everyone is special then is anyone special? Anyone who has been doing therapy for any significant length of time will likely have noticed that while each person is unique as an individual, their problems are often remarkably redundant: here's yet another person suffering with an anxiety

disorder, another couple suffering in a distressed marriage, and another person feeling unhappy with life, and so on. Is the problem in them? Or is it in their process, i.e., the steps they follow leading to distress? By asking 'how' questions rather than 'why," we can more readily identify unhelpful processes and know where to intervene. In this address, I will describe how hypnosis can be used to help build better processes that are life-enhancing.

When people follow ineffective sequences, identifiable steps that lead them down a symptom-producing path of experience, anyone following those same steps will end up in the same psychological place. Individual differences matter less: it no longer matters how many academic degrees they might have, or what their job is, or what they like to do on their days off. For as long as they continue to do whatever they do (cognitively, behaviorally, emotionally, interpersonally, etc.) in the same problematic way, the unfortunate outcome can be quite predictable. The problem is not in them. Rather, it's in their process.

Based on Dr. Yapko's most recent book, *Process-Oriented Hypnosis*: *Focusing on the Forest, Not the Trees*, the advantages of a macro-view of people's problems will be described as a complement to the more typical micro-views clinicians focus upon. The Society for Clinical and Experimental Hypnosis gave this book its esteemed Arthur Shapiro Award for "best book on hypnosis in2021.

Learning Objectives

1) Describe and discuss recent studies on the role of over-general cognitive style in treatment response.
2) Demonstrate how general language can generate specific effects in the listener.3
3) List and describe the key components of a "process-oriented hypnosis".

4:45 – 5:45 PM

Break

5:45 -6:00 PM

Poster Set up for Poster Presenters

Poster presenters should affix their poster to the poster board number that corresponds with their listing on the website of <u>Accepted Posters</u>.

6:00 - 7:00 PM   1.0 CE/CME

Poster Session

Join colleagues as we visit with our Poster Authors and to view their posters and discuss their work.

View the list of Accepted Posters.

7:00 - 9:00 PM

Annual Awards Banquet

Join colleagues as we celebrate the 75th Anniversary of the Society and recognize the work of colleagues in the hypnosis community. View a list of SCEH Awards.

Sunday, Oct. 27, 2024

Sunday, Oct.27

8:30 AM - 9:30 AM   1.0 CE/CME

Keynote

The "Vital" Placebo: Experiences of the Unleashed Mind

Jon K. Amundson, MA, MAPP, PhD, private practice, Calgary, Alberta, Canada

This presentation explores the capability of the mind when freed from habitual constraints, showcasing both traditional and non-traditional healing practices. We will try to string both evidence-based, scientific methods like brain stimulation, bio/neurofeedback, and hypnosis as well as traditional healing approaches: meditation, yogic disciplines, traditional Chinese practices, and the use of plant medicine/psychedelic therapies on common thread. The talk touches upon states of mind existent and the external, contextual influences that shape our responses. Central to our discussion is the "vital" placebo--highlighting its significant role in enhancing patient outcomes by bridging clinical practices with patient experiences through both a philosophical and research-based lens.

Learning Objectives

1) Describe an expanded definition of the placebo and its place in healing.

9:30- 10:00 AM   0.5 CE/CME

Research Spotlight 2

Neural correlates and discrete response patterns of hypnotic susceptibility

Mathieu Landry, PhD, Universite de Montreal, Montreal, Quebec, Canada and David Ogez, PhD, and Karim Jerbi, PhD, Universite de Montreal & CRHMR, Montreal, Quebec, Canada

Hypnotic phenomena exhibit significant variability across individuals, often attributed to the interplay between a primary psychological ability and secondary skills. This study utilizes the Harvard Group Scale for Hypnotic Susceptibility to explore this concept across two investigations. In the first study (N=40), we used resting-state electroencephalography (rs-EEG) to identify neural correlates of hypnotic susceptibility before and after hypnotic induction. A classifier differentiated between low and high susceptibility based on spectral features and connectivity patterns, highlighting the complexity of hypnotic susceptibility. Notably, aperiodic rs-EEG activity outside hypnosis emerged as a critical neural feature distinguishing susceptibility level, supporting the notion that hypnotic susceptibility represents a latent trait. The second study (N=681) examined patterns of hypnotic responsiveness based on the factorial structure underlying hypnotic susceptibility. Factorial analysis revealed a central component underpinned by secondary factors. Discrete clustering of scores identified a specific group highly susceptible to hypnosis, while no similar group was found for low susceptibility. This suggests that individuals with low susceptibility scores may have a greater capacity to respond than previously recognized.

Learning Objectives

1) Describe the latest advances in the neurophysiology of hypnotic phenomena.
2) Describe recent research on individual differences in hypnotic responsiveness.
3) Descr[be the application of machine learning tools in neurophysiological research on hypnosis.

10:00 – 10:15 AM

Break

10:30 - 11:00 AM   0.5 CE/CME

Technology Spotlight 2

Predicting Hypnotic Depth using Transfer Learning

Yeganeh Farahzadi, MS, Eotvos Lorand University, Belvaux, Luxembourg; Morteza Ansarinia, PhD, Department of Behavioral and Cognitive Sciences, University of Luxembourg, Belval, Luxembourg; Zoltan Kekecs, PhD, Department of Affective Psychology, Eotvos Lorand University, Budapest, Hungary

This research introduces a novel approach in EEG data analysis for exploring the neural basis of hypnosis through deep neural networks. Traditional EEG methods are limited by their reliance on predefined features, which may not capture the complexity of phenomena such as hypnosis. Our approach utilizes neural networks to automatically learn optimal data representations directly from EEG signals with minimal preprocessing steps. We leverage the publicly available Mind-Brain-Body dataset, containing EEG recordings from 204 individuals during rest. Using a self-supervised learning approach, we train a neural network to reconstruct corrupted data segments, enabling it to learn the inherent spatial and temporal characteristics of EEG signals. We then fine-tune this model using data from 52 participants collected during hypnosis sessions, focusing on decoding their hypnotic experiences. Finally, we apply interpretable AI techniques to elucidate the specific features extracted by the network and their role in predicting hypnotic experiences.This project is still ongoing, but we anticipate promising outcomes by the time of the conference. We believe that our findings will significantly advance our understanding of neural underpinning of hypnosis, potentially leading to more effective and personalized treatment plans.

Learning Objectives

1) Explain how state-of-the-art deep learning methods, including self-supervised learning, can be applied to analyze EEG data in the context of hypnosis research, while considering the potential advantages and limitations of these approaches.

11:00 - 11:30 AM   0.5 CE/CME

Technology Spotlight 3

The Machine Will See You Now: The Potential and Perils of the New Era of Automated Clinical Hypnosis Treatment via Electronic Devices

Olafur Palsson, PsyD, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, United States

Technology platforms are making clinical hypnosis treatment more widely available than ever before. The majority of hypnosis clinicians now offer remote hypnotherapy via video conferencing. In 2021, the U.S. Food and Drug Administration (FDA) formally authorized the first-ever entirely automated hypnosis treatment for a health problem: A physician-prescribed smartphone app delivering the North Carolina Protocol for irritable bowel syndrome. Several other clinical hypnosis treatment apps are on the market or under development. With practically unlimited scalability, the convenience of home treatment, and low cost to users, machine-delivered treatment represents an unprecedented opportunity for clinical hypnosis to enter mainstream healthcare. However, many factors can potentially limit the value of this delivery mode. Drawing on the experience so far in the gastrointestinal hypnosis domain, this presentation will discuss (1) the nature and evidence of efficacy of fully automated hypnosis interventions; (2) the risks of doing automated hypnosis wrong, including inappropriate shortcuts and over-simplifications, unqualified creators/developers, inadequate testing and validation, and shortcomings in client screening, support, or engagement; (3) the prospects and limitations of hypnosis technologies in near future, including the role of Artificial Intelligence; and (4) how machine-delivered hypnosis will fit with the traditional domain of hypnosis services by human clinicians.

Learning Objectives

1) Describe at least three common shortcomings in design that need to be avoided in order for fully automated app-based clinical hypnosis interventions to be effective.

11:30 - 1:00 PM   1.5 CE/CME

Presidential Symposium: Clinical Directions

Chair: *Barbara McCann, PhD, University of Washington, Seattle, Washington, United States, and President, Society for Clinical and Experimental Hypnosis*

PS1 - A Pilot Investigation of a Culturally-Adapted and Islamically-Infused Group Therapy for Muslims with Serious Mental Illness and Transdiagnostic Concerns

Merranda McLaughlin. MS; Salman Ahmad, MS; Malena Price, MS; Amy Weisman de Mamani, PhD, University of Miami, Coral Gables, Florida, USA

Muslims living in the United States (MLUS), despite growing mental health concerns (Amer & Hovey, 2012; Awaad et al., 2021) tend to underutilize psychotherapy (Ali et al., 2022). Some barriers to help-seeking include mental health stigma and lack of cultural/religious knowledge of potential clinicians (McLaughlin et al., 2022). Culturally Informed Therapy, a module-based CBT therapy

(Weisman de Mamani et al., 2022) was adapted to a remote, group therapy setting for Muslims across Florida with either serious mental illness or transdiagnostic concerns. We hypothesized clients would have high rates of satisfaction as measured by a 0-7 rating scale and show reductions in distress (CORE-10). Our preliminary data of 11 Muslim participants indicates there were high levels of satisfaction (M = 6.00, SD = .93) and decreased distress pre-to-post intervention, t(10)=2.78, p= .020. Qualitative findings from clients indicate they benefitted from the infusion of Islamic principles within the foundation of CBT, weekly session-relevant Quranic verses, the use of Islamic meditation, as well as connecting the research on mindfulness to Islamic prayer and ritual. Expanding on these findings, we will consider how our application of Islamic meditation and mindful practice might give insight into the application of other hypnotic techniques for this population.

Learning Objectives

1) Identify a culturally-sensitive method of integrating Islamic religious coping or mindfulness to promote wellbeing for Muslim clients within a therapeutic setting

PS2   Combining brief hypnotic intervention for perinatal anxiety with acceptance and commitment therapy techniques

Nicola Park, MD and Badeea Qureshi, PhD, University of Washington, Seattle, Washington, United States

Hypnosis is effective for perinatal anxiety and depression and known to improve subjective experience of pregnancy. Acceptance and commitment therapy (ACT), also evidence-based, encourages values-based cognitive flexibility and present-moment awareness. We describe a brief intervention integrating ACT and hypnosis. The subject was a 32-year-old psychiatry resident G3P2 at 35w gestation age with pregnancy complicated by gestational diabetes. She described high stress following an ultrasound appointment, complicated by feeling overwhelmed by conflicting health and work demands. Hypnosis included suggestions for visualizing a healthy fetus on ultrasound. ACT-based suggestions included values-focus and present-moment awareness to address stressful feelings. The subject reported rapid resolution of physiological and mental stress during/after the session. She experienced gratitude towards her growing family, increased confidence and appreciation in pregnancy, and ability to re-frame her ultrasound experience. She felt permission to make the health of self and baby a priority. Six months post-hypnotic intervention she recalled a lessened burden of health appointments. She noted the session's experiential approach allowed these notions to become rapidly and deeply learned.We conclude that hypnosis and ACT synergize to enhance here-and-now experiences, value-finding, metaphors, collaboration between therapist and client, and cognitive flexibility.

Learning Objectives

1) Describe the overlap between the principles of hypnosis and acceptance and commitment therapy (ACT).
2) Describe how ACT principles can synergize with hypnosis to help subjects clarify their values, contact the present moment, and practice cognitive flexibility.

PS3 - Hypnosis Training and Certification: A Systematic Review

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Using hypnosis in a therapeutic setting remains unregulated in most U.S. states. Lay hypnotists, those without formal medical or mental health training, are increasingly offering hypnosis services under various titles such as "certified hypnotherapist" or "master hypnotist." This trend raises questions regarding the ethical and clinical implications of lay certification programs. We conducted a systematic review to examine the landscape of hypnosis training and certification. We analyzed 133 organizations offering hypnosis/hypnotherapy training and certification programs. Data were collected from organizational websites and available training materials. We evaluated programs based on content related to: a) certification title, b) certifying organization, c) training format, d) training time, e) training requirements, f) price, g) prerequisites, h) specializations, i) instructor credentials, j) availability of ethical guidelines, and k) efficacy claims. Data are currently being analyzed and we anticipate they will provide a detailed overview of hypnosis training. We will discuss the current training landscape and its implications for clinical hypnosis as a field of science and therapeutic intervention. We anticipate that further research is needed to explore the potential impact of lay hypnotists on patient safety and well-being.

Learning Objectives

1) Describe the current landscape of both professional and lay hypnosis training and certification.
2) Identify ethical considerations associated with training programs considering current state regulations.

PS4 - Feasibility of a Brief Mindful Hypnosis Intervention for Emotion Regulation and Wellbeing in College Students: A Mixed-Methods Randomized Controlled Feasibility Trial

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College students are prone to an array of mental health problems stemming in part from poor emotion regulation skills and an increase in academic and life stressors. Mindful hypnotherapy has been previously shown to be potentially beneficial for improving emotion regulation. The aim of the present study is to investigate the impact and feasibility of a single session mindful hypnotherapy

intervention for emotion regulation and wellbeing in college students. Participants are randomly assigned to either a single session mindful hypnotherapy session or a progressive muscle relaxation and education session and are provided with an audio recording for home practice. The feasibility of accrual, randomization, retention, adherence, and satisfaction are primary outcomes. In addition, themes and changes in emotion regulation, mindfulness, depression, anxiety, stress, and wellbeing will be explored. Preliminary findings will be shared and discussed.

Learning Objectives

1) Describe how mindful hypnotherapy can be applied to improve emotion regulation and wellbeing.

1:00 PM

Scientific Program Adjourns

2024 Annual Conference
75th Annual Workshops and Scientific Program
October 23-27, 2024 (Wednesday-Sunday) *Mind Unleashed*
Anaheim Majestic Garden Hotel, Anaheim, CA
https://www.sceh.us/conference-details