Training Your Brain To Adopt Healthful Habits: Mastering the Five Brain Challenges

An 18-Hour Home Study Program for Health Professionals | 280-Page Book

Why is it so hard to maintain healthful habits? This program explains successful processes to initiate and maintain change from a neuroscience perspective. Specifically, the program examines five key brain challenges that underlie many of the most effective cognitive, behavioral and pharmacological strategies for changing health behaviors and maintaining healthful practices. The neuroscience is presented simply and focused on the practical. Each brain challenge is followed by exercises to target brain processes, encouraging health professionals or patients to change these processes. The text serves as a guide to learn how and why active participation is needed to produce meaningful change.

The program focuses on mastering five key brain challenges:
1. Learning to highly value behaviors that promote wellness while devaluing behaviors that lead to poor health.
2. Enriching one’s life to tame the need for immediate gratification.
3. Enhancing resiliency to threats and chronic stressors.
4. Training one’s addiction circuits that respond to drugs as well as “comfort foods” to make healthful behaviors habitual.
5. Making flexible decisions to empower the prefrontal cortex to make healthful choices.

Participants completing the program should be able to:
1. Identify how the brain weighs options when making health-related decisions.
2. Discuss how opportunities for reward get overvalued.
3. List social factors that can overvalue habits and sabotage our health.
4. Describe how the brain’s reward system is sabotaged by addictive substances.
5. State how we can correct value estimates, including reframing and challenging expectations.
6. Discuss how impulse control is affected by neuronal processes.
7. Outline several ways that illustrate how life enrichment imparts impulse control.
8. Define and give examples of reward deficiency syndrome.
9. Describe how chronic stress increases the need for immediate gratification.
10. List several effects of adverse early childhood experience on adult stress.
11. List several ways to develop greater stress resilience.
12. Compare and contrast habits that can be automatic from those that are acquired.
13. Provide three examples of how we learn new behaviors.
14. List several ways for how new behaviors can turn into old habits.
15. Explain why willpower is not enough.
16. Describe how problem-solving skills can develop and can disappear.
17. List several ways to improve problem-solving and cognitive skills.
18. Summarize key principles using the example of weight loss.

Challenge 1: How to Value What Makes Us Healthy

How Your Brain Weighs Health-Related Decisions
- Calculating the value of an opportunity
- Dopamine neurons and reward expectations
- Immediate gratification and the limbic system
- Delayed gratification and the prefrontal cortex

How Opportunities For Reward Get Overvalued
- Social reinforcement and peer pressure
- Power of suggestion: placebo and nocebo effects
- Impaired expectancy and alcohol-related decisions
- Marketing your own expectations and rewards

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Social Factors in Overvaluing Habits and Sabotaging Health
• How habits are contagious
• Why we love to sabotage attempts at self-improvement
• When helping is hurtful: rescuing, doting, enabling
• How verbal reinforcement alters our experience

Hijacking the Brain’s Reward System
• The attraction of addictive substances
• Spiraling out of control: overvaluing drug reward
• Speed and intensity of drug absorption: addiction or not?

How to Assess the True Value of a Reward
• How to correct value estimates
• Reframing: adopting a new perspective
• Tackling irrational fears: treating phobic disorders
• Comparing self against others: social comparison biases
• Revealing internal contradictions between how we think and act

Challenge 2: Taming the Need for Immediate Gratification

Reducing Maladaptive Habits By Improving Impulse Control
• Neural control of our impulses
• The neurons that desire immediate gratification
• Inhibiting the neurons that seek immediate gratification

Life-Enriching Activities
• Enhancing communication skills
• Breaking problems down to manageable steps
• Doing what you love and loving what you do

Reward-Deficiency Syndrome
• Dopamine deficiency: addiction, depression and obesity
• Raised to be mild or wild?
• Social hierarchy and need for immediate gratification
• Dopamine deficiency and consuming passions
• Risks of immediate gratification
• How to change your environment to resist temptations

Challenge 3: Increasing Resilient to Threats and Chronic Stress

How Stress Increases Need for Immediate Gratification
• Why and how we respond to stress
• Understanding stress triggers
• Chronic stress, immediate gratification and serotonin
• Reducing chronic stress by achieving greater sense of control
• Understanding posttraumatic stress: horror frozen in memory
• Achieving greater control over stressors in your life.

Effects of Early Childhood Stress
• What prepares us for stress: the stress hormone cortisol
• The enduring effects of maternal anxiety and separation
• Separation anxiety: overcoming past stressors

How We Can Develop Greater Stress Resilience
• Pacing, scheduling and self-care: the sleep connection
• Detrimental effects of overwork and sleep deprivation
• Pre-planning and problem-solving
• Relaxation: a neurobiological perspective

Challenge 4: Retraining Your Addiction Circuits to Make Healthful Behaviors Habitual

Healthful Behaviors as Habit-Forming
• How habits become automatic
• What behaviors can become automatic?
• What happens to brain processing as habits form?

How We Learn New Behaviors
• Imitation, mirror neurons and importance of modeling
• Importance of observation
• Increasing your confidence to do a behavior: practice
• Modeling, encouragement and anxiety reduction

Turning a New Behavior Into an Old Habit
• Practice, practice, practice: how much, how often
• Obtaining social support
• Monitoring and feedback
• Creating immediate contingencies for health behavior

Challenge 5: Making Flexible Decisions to Empower Your Brain to Make Healthful Decisions

Delaying Automatic Unhealthy Habits
• Why willpower is not enough
• The limits of willpower in overcoming habits
• Alternatives to willpower

How Problem-Solving Skills Develop and Disappear
• Developmental stages and cognitive decline
• Risk aversion and risky decision-making
• Use it or lose it: effects of novelty and activity: protecting the aging brain
• Enhancing neuronal regrowth (neurogenesis)

Improving Problem-Solving and Cognitive Skills
• What prevents problem-solving?
• Tricks for helping your prefrontal cortex

Surmounting the Challenges: The Example of Weight Loss
A review and application of the five brain challenges

PRIMARY AUTHOR
Jodie Trafton, Ph.D., a neuroscientist and mental health services researcher, designs and evaluates treatment systems for addiction, chronic pain and anxiety disorders for the 140 medical centers within the Veterans Health Administration as Director of the VA’s Program Evaluation and Resource Center. She is Editor in Chief of the three-volume series, Best Practices in the Behavioral Management of Chronic Disease, the most comprehensive reviews of programs for changing health-related behaviors and habits.

An outstanding instructor, Dr. Trafton teaches a highly rated series of classes at Stanford University for graduate students and medical residents on topics including addictions and strategies for managing pain, impulse control and habits. Health professionals recommend her ability to present practical discoveries with clarity, enthusiasm and warmth.
Child and Adolescent Clinical Psychopharmacology Made Simple
A 12-Hour Home Study Program for Health Professionals | 184-Page Book

Issues in Psychopharmacological Treatment of Children and Adolescents

- Diagnosing and treating children and adolescents
- Informed consent and addressing parental concerns
- Medications and the media
- Drug research and outcome studies
- Medication metabolism in young clients
- Approved drugs and off label use
- Attitudes and realities

Depressive Disorders

- Diagnostic issues
- Symptoms of major depression in children
- Indications of bipolar disorder
- Efficacy of antidepressants
- Comparing SSRIs, SNRIs, SRLs, NDRIs and Atypicals
- Common side effects of each type
- Antidepressants and suicidality
- Treatment of depressive subtypes
- Medication discontinuation and relapse prevention

Bipolar Disorders

- Diagnostic issues
- Signs and symptoms of early-onset mania
- Differentiating bipolar disorder from ADHD
- Bipolar disorder combined with ADHD
- Bipolar disorder combined with anxiety disorders
- Neurobiology of bipolar disorder
- Psychopharmacology: mood stabilizers and anticonvulsants
- Guidelines for pharmacological treatment
- Mania, depression and manic switching
- Doses and side effects
- Relapse prevention
- Interactions with drugs commonly used in pediatrics

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Anxiety Disorders
- Obsessive-compulsive disorder
- Panic disorders
- Social phobia
- Specific phobias
- Generalized anxiety
- Posttraumatic stress disorder
- Separation anxiety disorder
- Inhibited temperament
- Neurobiology of other anxiety disorders
- Pharmacology of obsessive-compulsive disorders
- Psychopharmacology of other childhood anxiety disorders

Psychotic Disorders
- Childhood schizophrenia: positive and negative symptoms and disorganization symptoms
- Psychotic mood disorders
- Psychosis associated with medical conditions
- Neurobiology
- Psychopharmacology
- Side effects of antipsychotic medications: extrapyramidal, anticholinergic, antiadrenergic, tardive dyskinesia, metabolic
- Guidelines for the pharmacological treatment of psychotic disorders
- Relapse prevention

Attention-Deficit/Hyperactivity Disorder
- Differential diagnosis
- Neurobiology of ADHD
- Pharmacology of stimulants: immediate versus sustained release, generic, brand and typical dose information
- Guidelines for pharmacological treatment of ADHD including side effects and solutions
- Consequences of misdiagnosis of ADHD as an anxiety disorder, agitated disorder, pre-schizophrenia, bipolar disorder, or situational stress
- Alpha-2 adrenergic agonists used to treat ADHD
- Antidepressants used to treat ADHD
- Combined behavioral treatment and psychopharmacology

Autism Spectrum Disorders
- Diagnostic issues of pervasive developmental disorders
- Rett’s disorder
- Childhood disintegrative disorder
- Pervasive development disorders
- Pathophysiology
- Psychopharmacology: serotonin medications, antipsychotics, beta-blockers, mood stabilizers, stimulants, opioid antagonists, oxytocin, miscellaneous agents

Miscellaneous Disorders: Diagnosis and Pharmacology
- Tic disorders and Tourette Syndrome
- Conduct disorder
- Anorexia nervosa
- Substance abuse: alcohol, stimulants, opiates, hallucinogens

Appendix: Patient and Caregiver Information

Psychiatric Medications

PRIMARY AUTHOR
John D. Preston, Psy.D., ABPP, is Professor at Alliant International University, and has been Associate Clinical Professor at University of California, Davis. A Board Certified Neuropsychologist, he is the author of numerous texts concerning brain and behavior including Counseling Survivors of Traumatic Events, Child and Adolescent Psychopharmacology, Handbook of Clinical Psychopharmacology, and is co-editor of Empirically Validated Approaches to Psychotherapy. Dr. Preston received the Mental Health Association’s President’s Award for exceptional contributions to the mental health community.

An outstanding and inspiring speaker, Dr. Preston has given over 500 invited seminars to health professionals in North America and abroad. Participants commend his ability to communicate key insights and practical information with clarity, enthusiasm and warmth.
Clinical Psychopharmacology Made Ridiculously Simple

A 12-Hour Home Study Program for Health Professionals | 87-Page Book

Chapter 1: General Principles

Chapter 2: Depression

- Major clinical features
- Differential diagnosis
- Common disorders and drugs that may cause depression
- Symptoms common to all depressions
- Vegetative symptoms
- Choosing medication: sedation and cholinergic effects
- Prescribing treatment: typical start-up regimes
- Decision tree for diagnosis and treatment: first episode
- Decision tree for diagnosis and treatment: subsequent episodes
- Special problems and medications of choice
- Side effect management: SSRIs
- Key points to communicate to clients
- If first line medications do not lead to remission
- Dysthyemia
- Selection actions of antidepressants on neurotransmitters
- Major depression with atypical symptoms
- Seasonal affective disorder
- Premenstrual dysphoric disorder
- Psychotic depressions
- Precautions: tricylic antidepressants
- Precautions: watch for bipolar disorder
- MAO inhibitors

Notes on complementary and alternative products

Chapter 3: Bipolar Illness

- Diagnosis
  - Common disorders and drugs that may cause mania
  - Bipolar I versus Bipolar II
  - Typical bipolar versus rapid cycling bipolar disorders
  - Dysphoric mania or mixed mania
  - Medications to treat bipolar disorders
  - When to prescribe

**NURSES:** Institute for Brain Potential (IBP) is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center's Commission on Accreditation. IBP is approved as a provider of continuing education by the California Board of Registered Nursing, Provider #CEP13896, and Florida Board of Nursing. This program provides 12 contact hours.

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Chapter 4: Anxiety Disorders
- Major clinical features and differential diagnosis
  o Generalized anxiety disorder
  o Stress-related anxiety
  o Panic disorder
  o Social phobias
  o Medical illnesses and medication side effects
  o Anxiety as a part of primary mental disorder
- Antianxiety medications
  o When to prescribe antianxiety medications:
    • Generalized anxiety disorder
    • Stress-related anxiety
    • Panic disorder
    • Social phobias
  o Choosing a medication
    • Generalized anxiety disorder
    • Stress-related anxiety
    • Stress-induced insomnia
    • Panic disorder
    • Social phobias
    • Common errors to avoid
  o Key points to communicate to patients

Chapter 5: Psychotic Disorders
- Major clinical features and differential diagnosis
  o Schizophrenia: positive and negative symptoms
- Psychotic mood disorders
- Psychosis associated with neurological conditions
- Common diseases and disorders that may cause psychosis
- Antipsychotic medications
  o How to prescribe antipsychotic medications
  o Choosing a medication
  o Four forms of extrapyramidal side effects
  o Prescribing treatment and what to expect
  o Key points to communicate to patients

Chapter 6: Miscellaneous Disorders
- Obsessive-Compulsive Disorder
  o Major clinical features
- Borderline Personality Disorder
  o Major clinical features
- Medical treatment
- Attention Deficit Hyperactivity Disorder
  o Symptoms of ADHD
  o Medications used to treat ADHD
- Aggression
  o Psychiatric disorders presenting with aggression
  o Medication options in the treatment of aggression
- Eating Disorders: Anorexia and bulimia
- Posttraumatic Stress Disorder
  o Treating transient psychotic symptoms
  o Treating acute symptoms of PTSD

Chapter 7: Non-Response and “Breakthrough Symptoms”
- Non-response checklist
- Unexplained pelapse checklist

Chapter 8: Case Examples
- Major depressions
- Bipolar illnesses
- Acute situational anxiety
- Panic disorder
- Acute schizophrenia

PRIMARY AUTHOR
John D. Preston, Psy.D., ABPP, is Professor at Alliant International University, and has been Associate Clinical Professor at University of California, Davis. A Board Certified Neuropsychologist, he is the author of numerous texts concerning brain and behavior including Counseling Survivors of Traumatic Events, Child and Adolescent Psychopharmacology, Handbook of Clinical Psychopharmacology, and is co-editor of Empirically Validated Approaches to Psychotherapy. Dr. Preston received the Mental Health Association’s President’s Award for exceptional contributions to the mental health community.

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Anxiety Disorders
A 4-Hour Text-Based Home Study Program for Health Professionals

Although anxiety-related disorders can be disabling and lifelong, advances in treatment have been successful. For example, cognitive behavioral therapies for panic and fear of public places are successful in a majority of appropriate cases by using techniques such as inducing panic-like sensations in otherwise safe environments. Exposure and response-inhibition therapies are highly effective for obsessive-compulsive disorders.

This program is designed to help health professionals identify symptoms and evidence-based treatments for the most common anxiety-related disorders.

Participants completing this program should be able to identify key diagnostic criteria and effective treatments for:
1. Panic disorder, with and without agoraphobia.
2. Social anxiety disorder and phobic disorder.
3. Obsessive compulsive disorder.

Introduction

Panic Disorder With and Without Agoraphobia (PDA)

• Description
• Cognitive Behavioral Treatments of PDA
• In Vivo Exposure
• Interceptive Exposure
• Cognitive Restructuring
• Efficacy of Panic Control Treatment
• Summary and Future Directions

Social Anxiety Disorder

• Description
• Cognitive Behavioral Treatment for Social Anxiety Disorder
• Cognitive Behavioral Group Treatment
• CBT versus Pharmacotherapy for Social Phobia
• Summary and Future Directions

Obsessive-Compulsive Disorder

• Description
• Treatment of Obsessive Compulsive Disorder
• Behavioral Treatment for OCD
• Efficacy of Behavioral Treatment for OCD
• ERP versus Cognitive Treatment
• ERP versus Pharmacotherapy
• Summary and Future Directions

Generalized Anxiety Disorder

• Description
• Cognitive Behavioral Treatments for GAD
• Summary and Future Directions

Conclusions

References

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Major Depression
A 5-Hour Text-Based Home Study Program for Health Professionals

Depression outranks diabetes, stroke, dementia, and lung cancer in terms of disease burden and is the leading cause of disability in people between 15 and 44 years of age. Further, major depression is a major risk factor for cardiovascular disease, sleep-related disorders, and memory impairments as well as shrinkage of the hippocampus, a region of the brain responsible for forming recent memories.

However, advances in treatment are becoming increasingly effective. Antidepressants are of great benefit, especially for the most serious forms of major depression. Further, cognitive behavioral therapies alone or in combination with pharmacotherapy have proven to be highly beneficial in a significant number of patients.

The purpose of this program is to provide key demographic,physiological, pharmacological, and psychological variables underlying the causes, diagnosis, and treatment of major depression.

Participants completing this program should be able to:
1. List key behavioral, cognitive, and health-related consequences of major depression.
2. Identify the safety and effectiveness of pharmacological therapies for treating and preventing recurrence of depression.
3. Identify the effectiveness of psychological interventions.
4. Identify the effectiveness of first line pharmacological interventions alone or in combination with psychological interventions.

• Major Depression: Fundamental Perspectives
• A Guide to the Text
• Major Depressive Disorder: Definition, Chronicity and Severity
• Risk and Vulnerability Assessment: Predicting the Likelihood of the First Episode of Major Depression
• Preventing the Initial Episode of Major Depression and Reducing Incidence
• Screening For Major Depression
• The Efficacy And Effectiveness Of Antidepressant Medication
• The Differential Efficacy and Effectiveness of Depression-Specific Psychotherapy Alone Compared to Antidepressant Medication Alone or the Combination
• Preventing The Reoccurrence Of Major Depressive Disorder: Reducing Episode Severity and Maintaining Recovery
• The Integration And Financing Of Mental And Behavioral Health And Primary Care Services In Organized Medical Settings
• Strategies To Decrease The Prevalence Of Major Depression In Populations
• Intervention Strategies Available To The Practicing Clinician
• Unanswered Research Questions
• References

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Pain rehabilitation programs with behavioral approaches can be more effective and cost-effective than spinal cord stimulators, implantable drug delivery systems, and surgery alone. This program presents key features of clients who experience chronic pain, describes appropriate measurement of pain, and outlines the effectiveness of behavioral interventions.

Participants completing this program should be able to identify:

1. Key characteristics of clients experiencing chronic pain.
2. The effectiveness of behavioral therapies for managing chronic pain.

Introduction

The Biopsychosocial Approach to Chronic Pain Management

- The Initial Assessment Phase
- The Pain Management Phase
- Interdisciplinary Pain Management

Effects of Complementary and Alternative Medicine on Chronic Pain

Effects of Coping on Chronic Pain

Clinical- And Cost- Effectiveness of Treatments for Chronic Pain

Biopsychosocial Management Of Chronic Pain: An Update

Systematic Reviews

Clinical Research Studies

Summary And Conclusions

References

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Long-Term Efficacy of Interventions to Reduce Substance Use

A 6-Hour Text-Based Home Study Program for Health Professionals

Introduction

• Scope of the Problem
• Abuse, Dependence and Addiction

Methods

Medication-Based Therapies

• Opioid Substitution Therapies
• Naltrexone Treatment for Opioid Addiction
• Naltrexone Treatment for Alcohol Addiction
• Disulfiram for Alcohol Addiction

Counseling-Based Interventions

• Brief Interventions
• Inpatient Treatment
• Cognitive Behavioral Therapy
• Contingency Management
• Self-Help and 12-Step Facilitation

Results

• Detoxification

References

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