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

A 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 improves 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.

CONTINUING EDUCATION

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 awarded “accreditation with distinction,” the highest recognition awarded by the ANCC. IBP is approved as a provider of continuing education by the CA Board of Registered Nursing, Provider ACEP3896, and by the FL Board of Nursing. This program provides 18 contact hours.

COUNSELORS, PSYCHOLOGISTS, SOCIAL WORKERS & MFTs: Institute for Brain Potential (IBP) has been approved by NBCC as an Approved Continuing Education Provider, ACE No. 6542. Programs that do not qualify for NBCC credit are clearly identified. IBP is solely responsible for all aspects of the programs. This program provides 20 CEUs.

IBP is approved by the American Psychological Association to sponsor continuing education for psychologists. IBP maintains responsibility for this program and its content. This program provides 18 CE credits.

IBP, Provider #1160, is approved as a provider for continuing education by the Association of Social Work Boards (ASWB), 400 South Ridge Parkway, Suite B, Culpeper, VA 22701, www.aswb.org. ASWB Approval Period: 11/11/17 – 11/10/17. Social workers should contact their regulatory board to determine course approval. Social workers will receive 18 continuing education clock hours for participating in this course.

IBP is approved as a provider of CE by the FL Board of Psychology, by the FL Board of Clinical Social Work, MFT and Mental Health Counseling, by the OH CSWMFT Board, Provider #CRST180801, by the IL Dept. of Professional Regulation MFT CE Sponsor Program, #168.000183, and by TX State Board of Examiners of MFTs, Provider #850. This program provides 18 CE hours.

SUBSTANCE ABUSE PROFESSIONALS: Institute for Brain Potential (IBP) is approved by the NAADAC Approved Education Program Provider, Provider #012949. IBP is approved by provider by CCAPP-EL, Provider Number 65-09-126-1217. This program provides 18 CEUs.

PHARMACISTS AND PHARMACY TECHNICIANS: IBP is accredited by the Accreditation Council for Pharmacy Education as a provider of continuing pharmacy education. This knowledge-based activity is designated for 18 contact hours (1.8 CEUs). UANs: 0492-0000-14-01541-P and 0492-0000-14-01541-T.

DENTAL PROFESSIONALS: IBP is designated as an Approved PACE Program Provider by the Academy of General Dentistry (AGD). The formal continuing dental education programs of this provider are acceptable by the AGD for Fellowship/Mastership and membership maintenance credit. Approval does not imply acceptance by a state or provincial board of dentistry or AGD endorsement. The current term of approval extends from 12/01/14 – 11/30/18. Provider ID# 312413. This program provides 18 hours of CE credit. Subject Code: 557.

IBP, Provider #R-4261, is authorized to confer continuing dental education for Dentists, Dental Hygienists and Dental Assistants by the Dental Board of California. IBP is an approved provider with the FL Board of Dentistry. This program provides 18 CE hours.

PHYSICAL THERAPISTS: This program is approved by IBP, which is an accredited approver by the Physical Therapy Board of CA. IBP is an IL Dept. of Professional Regulation Approved CE Sponsor for PTs and PTAs, #216.000210. IBP is recognized by the NY State Board of Physical Therapy as an approved sponsor of physical therapy CE. This program provides 18 CE hours.

MASSAGE THERAPISTS: IBP is an approved CE provider by the FL Board of Massage Therapy.

SPEECH-LANGUAGE PATHOLOGISTS: IBP is an approved provider by the CA SLPA, # FDP247. This program provides 18 CE hours.

RESPIRATORY CARE PROFESSIONALS: RCPs in New York receive 18 hours of Category III credit through IBP’s accreditation by the ANCC. IBP is approved by the CA Board of Registered Nursing, ACEP3896, and as such, its CE offerings are accepted by Respiratory Care Board of CA. This program provides 18 CE hours.

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
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 contractions 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 Veteras 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 Home Study Program for Health Professionals | 184-Page Book

Child and Adolescent Clinical Psychopharmacology Made Simple provides succinct and clear information for nurses, behavioral health professionals, pharmacists, and allied health professions on the diagnosis and pharmacologic treatment of children and adolescents with depression, bipolar disorder, anxiety disorders, psychotic disorders, attention-deficit/hyperactivity disorder, autism spectrum disorders, and miscellaneous disorders. Useful patient and caregiver information sheets are provided including dosing and side-effect profiles.

Participants completing this program should be able to identify psychopharmacological treatment of children and adolescents with the following conditions:
1. Depression
2. Bipolar Disorders
3. Anxiety Disorders
4. Psychotic Disorders
5. Attention-Deficit/Hyperactivity Disorder
6. Autism Spectrum Disorders
7. Miscellaneous disorders

CONTINUING EDUCATION

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 awarded "accreditation with distinction," the highest recognition awarded by the ANCC. IBP is approved as a provider of continuing education by the CA Board of Registered Nursing, Provider # CEP13896, and by the FL Board of Nursing. This program provides 12 contact hours.

PHARMACISTS AND PHARMACY TECHNICIANS: IBP is accredited by the Accreditation Council for Pharmacy Education as a provider of continuing pharmacy education. This knowledge-based activity is designated for 12 contact hours (1.2 CEUs). UANs: 0492-0000-17-009-H01-P and 0492-0000-17-009-H01-T.

DENTAL PROFESSIONALS: IBP is designated as an Approved PACE Program Provider by the Academy of General Dentistry (AGD). The formal continuing dental education programs of this provider are accepted by AGD for Fellowship/Mastership and membership maintenance credit. Approval does not imply acceptance by a state or provincial board of dentistry or AGD endorsement. The current term of approval extends from 12/01/14 – 12/01/18. The program provides 12 CEU hours.

COUNSELORS, PSYCHOLOGISTS, SOCIAL WORKERS & MFTs: Institute for Brain Potential (IBP) has been approved by NBCC as an Approved Continuing Education Provider, ACEP No. 6342. Programs that do not qualify for NBCC credit are clearly identified. IBP is solely responsible for all aspects of the programs. This program provides 5.75 CE hours.

IBP is approved by the American Psychological Association to sponsor continuing education for psychologists. IBP maintains responsibility for this program and its content. This program provides 12 CE credits.


IBP is approved as a provider of CE by the FL Board of Psychology, by the FL Board of Clinical Social Work, MFT and Mental Health Counseling, by the OH CSWMFT Board, Provider #RCH0801, by the IL Dept. of Professional Regulation MFT CE Sponsor Program, #166800183, and by TX State Board of Examiners of MFTs, Provider #R30. This program provides 12 CE hours.

SUBSTANCE ABUSE PROFESSIONALS: Institute for Brain Potential (IBP) is approved by the NAADAC Approved Education Provider Program, Provider #102490. IBP is approved by provider by CCAPP-EL Provider Number #09-09-126-1217. This program provides 12 CEUs.

PHARMACISTS AND PHARMACY TECHNICIANS: IBP is accredited by the Accreditation Council for Pharmacy Education as a provider of continuing pharmacy education. This knowledge-based activity is designated for 12 contact hours (1.2 CEUs). UANs: 0492-0000-17-009-H01-P and 0492-0000-17-009-H01-T.

DENTAL PROFESSIONALS: IBP is designated as an Approved PACE Program Provider by the Academy of General Dentistry (AGD). The formal continuing dental education programs of this provider are accepted by AGD for Fellowship/Mastership and membership maintenance credit. Approval does not imply acceptance by a state or provincial board of dentistry or AGD endorsement. The current term of approval extends from 12/01/14 – 11/30/18. Provider ID #T212413. This program provides 12 hours of CE credit. Subject Code: 337.

IBP, Provider #RIP-263, is authorized to confer continuing dental education for Dentists, Dental Hygienists and Dental Assistants by the Dental Board of California. IBP is an approved provider with the FL Board of Dentistry. This program provides 12 CE hours.

PHYSICAL THERAPISTS: This program is approved by IBP, which is an accredited approver by the Physical Therapy Board of California. IBP is an IL Dept. of Professional Regulation Approved CE Sponsor for PTs and PTAs, #2260000210. IBP is recognized by the NY State Board of Physical Therapy as an approved sponsor of physical therapy CE. This program provides 12 CE hours.

MASSAGE THERAPISTS: IBP is approved by the IL Dept. of Professional Regulation, #245-000485. This course provides 12 CE hours. This course is approved for 12 hours of "General" CE Credit by the FL Board of Massage Therapy.

SPEECH-LANGUAGE PATHOLOGISTS: IBP is approved by the CA SLPA, # FTP247. This program provides 12 CE hours.

RESPIRATORY CARE PROFESSIONALS: RCPs in New York receive 12 hours of Category III credit through IBP's accreditation by the ANCC. IBP is approved by the CA Board of Registered Nursing, #CETP3986, and as such, its CEs are accepted by Respiratory Care Board of CA. This program provides 12 CE hours.

Initial Release Date: 02/04/2017 Expiration Date: 02/04/2020 Content Level: Intermediate

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, SRIs, 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
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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
- Dysthymia
- Selection actions of antidepressants on neurotransmitters
- Major depression with atypical symptoms
  - Seasonal affective disorder
  - Premenstrual dysphoric disorder
  - Psychotic disorders
  - Precautions: tricyclic 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
Chapter 4: Anxiety Disorders
- Major clinical features and differential diagnosis
  - Generalized anxiety disorder
  - Stress-related anxiety
  - Panic disorder
  - Social phobias
- Medical illnesses and medication side effects
- Anxiety as a part of primary mental disorder
- Antianxiety medications
  - When to prescribe antianxiety medications:
    - Generalized anxiety disorder
    - Stress-related anxiety
    - Panic disorder
    - Social phobias
- Choosing a medication
  - Generalized anxiety disorder
  - Stress-related anxiety
  - Stress-induced insomnia
  - Panic disorder
  - Social phobias
  - Common errors to avoid
- Key points to communicate to patients

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

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

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**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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