Upgrade Program Cognitive Plan

Table of Contents

| Introduction | 2 |
|------------------|----|
| Epistemic Status | 2 |
| Objectives | 2 |
| Metrics | 3 |
| Values | 3 |
| Value Analysis | 3 |
| Strategies | 3 |
| Actions | 4 |
| Assessments | 5 |
| Tools | 8 |
| Resources | 12 |
| Schedule | 14 |
| Predictions | 14 |
| Outcomes | 14 |
| Notes | 15 |
| Legal | 15 |

Introduction

This document is part of a series of upgrade plans for every <u>area</u> of your life. It's broadly designed for a single, middle-class, 30-something living in a major city in a developed country.

Improving your intelligence is one of the most valuable things you can ever do. Intelligence is radically underrated by most of the population, mostly because it's hard to assess how valuable it is unless you're already extremely intelligent. Although your fixed general mental ability is mostly fixed, there are a number of strategies, tactics, and tools you can use to effectively improve your intelligence by a substantial margin.

Please go to "File" > "Make a copy" and make a copy of it for yourself. Then fill it out section by section according to your particular needs and circumstances. Perhaps add sections or items, delete them, change the order, and so on.

Your aim should be to make the plan as applicable and useful to you as possible. You should not follow the plan blindly—think it through for yourself.

Note that this process might be challenging. You might need to teach yourself things you aren't very knowledgeable about yet. You might feel like you need to do preliminary work in a different life area first. That's okay. Figure out broadly what makes sense for you, operationalize that understanding as specific actions in the <u>Actions</u> section, and then do them.

If it feels overwhelming, just start with the parts you find most valuable and do what you can. Tackle the rest over time. It may also help to set aside a dedicated <u>day</u> to work exclusively on this by yourself or with friends. Or you may choose to enlist an <u>UP Coach</u> to co-design and execute this plan alongside you.

Epistemic Status

This is an overview of how confident the principal <u>author</u> is in this plan.

- Generally very high confidence in plan
- Based on 27+ years of experience intentionally learning about and shaping my mind and the minds of hundreds of others (e.g., clients, mentees, teammates, etc.)

Objectives

Decide what objectives you have with this plan and rank them in order of importance. Below are some sample objectives.

- 1. Develop and maintain optimal cognitive skills and abilities
 - a. Sustained attention
 - b. Response inhibition
 - c. Speed of information processing
 - d. Cognitive flexibility
 - e. Multiple simultaneous attention
 - f. Working memory
 - g. Category formation
 - h. Pattern recognition
- 2. Prevent decrease of cognitive skills and abilities with advancing age

Metrics

Decide what metrics you will use to evaluate the effectiveness of this plan. Also include the frequency in which you'll evaluate those metrics (e.g., ad hoc, once, hourly, daily, weekly, monthly, quarterly, annually or per decade). Below are some sample metrics.

- Cognitive Rating: How would you rate your cognitive ability, on a 1-10 scale?
- Intelligence Quotient (IQ)
- Dual N-Back Score
- Number of Recorded Notes
- Number of Recorded Insights

Values

List all of your relevant values and rank them in order of importance. Below are some sample values.

- 1. Intelligence
- 2. Effectiveness
- 3. Efficiency
- 4. Knowledge
- 5. Self-awareness
- 6. Self-growth

Value Analysis

List and then analyze all of the costs and benefits of this plan. Potentially also estimate expected value, cost-benefit, return on investment, and/or net present value.

- Time costs: 1 10,000 hours
- Financial costs: \$0 \$250,000 dollars (e.g., university degrees, nootropics, psychedelics, courses, books, apps, etc.)
- Benefits: \$X in potentially extremely large objective and subjective benefits (e.g., impact, financial compensation, skill development, status, connections, etc.)

Strategies

Decide on your high-level strategies for achieving your objectives. Below are some sample strategies.

Key People

- Do the work on your own
- Outsource some or most of the work to experts (e.g., cognitive psychologists, performance experts, etc.)
- Outsource some or most of the work to assistants

Key Timings

- Make incremental progress every day until you reach your objectives
- Make as much progress as you can over a set period (e.g., one week, one month or one year)
- Intensively invest resources until you reach your objectives

Actions

List the specific actions you will take to achieve your objectives. You should add these tasks to your project management system unless you are choosing to do them now. Below is an example sequence of actions you might take.

- 1. Describe your <u>mental model</u> of your cognition
 - a. Create a visual representation from memory without referencing this plan or outside sources of information
 - b. Create a new visual representation after thoroughly studying this plan and any relevant sources of information

- c. Pay special attention to the improvements in the second version as incorporating those new insights may be crucial to the success of your plan
- 2. Finish every section of this plan, including the <u>assessments</u>, <u>tools</u>, and <u>resources</u> below
- 3. Build and maintain an exocortex you seamlessly interface with
 - a. Improve your knowledge base
- 4. Do literature searches often
 - a. Save your results in your exocortex
 - b. Review your results periodically
- 5. Build and manage a team you use to think with and for you
 - a. Review your collective decision-making periodically
- 6. Improve your sleep
- 7. Improve your <u>health</u>
- 8. Improve your <u>nutrition</u>
 - a. Eat a healthy diet
 - b. In general, avoid drugs, alcohol, and smoking
 - c. Experiment with time-restricted eating and/or fasting
- 9. Improve your fitness
 - a. Do regular aerobic and resistance exercises¹
- 10. Improve your <u>consciousness</u>
- 11. Develop your sense of self
- 12. Consider carefully using nootropics under the supervision of your doctor
- 13. Consider doing traditional "brain exercises"
 - a. Regularly try novel activities
 - b. Perform neurobic exercises (e.g., get dressed in the morning with your eyes shut, brush your teeth with the other hand, etc.)
 - c. Perform other mental exercises (e.g., math calculations)
 - d. Improve whole brain blood flow with strategy-based brain training exercises
 - e. Create pictures of words in your mind
 - f. Make music
 - g. Learn a new language
 - h. Learn a new sport
 - i. Talk to people with diverse viewpoints
 - j. Accept challenges
 - k. Solve problems
 - I. Make use of "wasted" time
 - m. Practice journaling
 - n. Think about how you think
- 14. Manage your cognitive abilities as you age^{2 3}

¹ Among other things, this increases your brain-derived neurotrophic factor (BDNF) levels

² When Does Cognitive Functioning Peak? The Asynchronous Rise and Fall of Different Cognitive Abilities Across the Life Span - Joshua K. Hartshorne, Laura T. Germine, 2015

³ Ageing and Skills: A Review and Analysis of Skill Gain and Skill Loss Over the Lifespan and Over Time | OECD Education Working Papers | OECD iLibrary

- a. Be mindful that your fluid intelligence peaks around age 20 and slowly declines afterwards
- b. Be mindful that crystallized intelligence generally increases until your 60s or 70s

Assessments

List all of the assessments you might take to understand how you're doing compared to your objectives. Below are some sample assessments.

- <u>3D Spatial Rotation Test</u>: a test to measure spatial ability
- Action Control Scale (ACS-24): a commonly used version of an ACS questionnaire designed to distinguish between an action and a state orientation
- Adult ADHD Self-Report Scale (ASRSv1.1): a questionnaire used to determine Attention Deficit Hyperactivity Disorder (ADHD) scale
- Adult Decision Making Competence (ADMC): an assessment designed to assess how well individuals make decisions
- Adult Dyslexia Checklist: a tool used to help understand whether there is a likelihood of dyslexia
- Altman Self-Rating Mania Scale (ASRM): a self-assessment questionnaire that can be helpful in assessing the presence and severity of manic or hypomanic symptoms
- Ambiguity-Probability Trade Off Task: a self-assessment designed to assess individuals' attitude toward ambiguity, which is defined as uncertainty about uncertainty
- <u>Bias Evaluation</u>: a questionnaire about how susceptible you are (and others) to various forms of bias
- <u>California Critical Thinking Skills Test (CCTST)</u>: a research-based, discipline-neutral
 assessment for undergraduate and graduate students or comparable population groups
 that is trusted worldwide as a valid, objective, and reliable measure of core reasoning
 skills (fee, inquiry required)
- <u>Cognitive Ability Test</u>: a test designed to measure an individual's cognitive function in a specific area, such as verbal reasoning, spatial awareness, or mathematics (UP Top Pick)
- <u>Cognitive Flexibility Scale (CFS)</u>: a 12-item self-report measure of cognitive flexibility in the context of effective communication
- <u>Cognitive Process Profile (CPP)</u>: a test that externalizes and tracks thinking processes to indicate a person's cognitive preferences and capabilities (fee, inquiry required)
- <u>Cognitive Style Indicator (CoSI)</u>: a questionnaire to assess preferences for information processing
- <u>Compensatory Style Questionnaire (CSQ)</u>: an assessment to measure how individuals approach decision situations
- <u>Comprehensive Assessment of Rational Thinking (CART)</u>: an assessment of rational thinking
- <u>Consideration of Future Consequences (CFC)</u>: an assessment to measure the importance people give to short-term or long-term consequences

- <u>Cornell Critical Thinking Test</u>: a test that aims to sketch out a picture of critical thinking abilities
- <u>Creative Achievement Questionnaire (CAQ)</u>: a self-report measure of creative achievement that assesses achievement across 10 domains of creativity
- <u>Creative Potential Test</u>: a test that is part of a research process for developing a measure
 of Creative Potential, a latent ability to produce original, adaptive work, which is part of an
 individual's
- <u>Creativity Scale</u>: a scale to measure how creative a person's personality is
- <u>Critical Thinking Test</u>: a test to assess the ability to make inferences and assumptions and to reason logically with arguments
- <u>Decision-Making Competence (DMC)</u>: an assessment to test decision-making ability in younger and older adults across a broad range of measures
- <u>Decision Styles Questionnaire (DSQ)</u>: a scale to assess 9 decision styles: respected, confident, spontaneous, dependent, vigilant, avoidant, brooding, intuitive, and anxious
- <u>Domain Specific Risk Attitude (DoSpeRT)</u>: an assessment to measure risk preferences through self-report in five domains
- <u>Dual N-Back</u>: an assessment to measure a part of working memory and working memory capacity
- <u>Dysfunctional Attitude Scale (DAS)</u>: a scale used to measure pervasive negative attitudes
 of a depressed person towards self, outside world, and future
- <u>Following Affective States Test (FAST)</u>: an assessment to measure preferences for information processing in multiple dimensions
- <u>Generalized Acceptance of Evolution Evaluation (GAENE)</u>: a measure that was designed to measure only evolution acceptance—not related knowledge or religious beliefs
- Global Assessment of Functioning: a numeric scale used by mental health clinicians and physicians to subjectively rate the social, occupational, and psychological functioning of an individual
- <u>Group Embedded Figures Test</u>: a 25-item assessment for exploring analytical ability, social behavior, body concept, preferred defense mechanism, and problem-solving style as well as other areas (US \$2.50-\$200)
- How Rational Are You?: a test of overall rationality which includes the 16 reasoning styles you use, where one's strengths lie, and what can be done to improve skills
- <u>Humor Styles Questionnaire (HSQ)</u>: a self-report measure that assesses the four different humor styles of affiliative, self-enhancing, aggressive, and self-defeating humor
- Intelligence Quotient (IQ) Test: a test to assess human intelligence
- <u>Jung Typology Test</u>: a test that measures preferences for dealing with and relating to people, processing information, making decisions, and organizing one's life
- <u>Maximization Scale (MS)</u>: an assessment to measure how individuals approach decision situations
- <u>Maximization Scale Short (MS-Short)</u>: a shorter assessment to measure how individuals approach decision situations (UP Top Pick)
- <u>Maximizing Tendency Scale (MTS)</u>: an assessment to measure how individuals approach decision situations

- Measure of Acceptance of the Theory of Evolution (MATE): a 20-item Likert-scaled instrument that assesses overall acceptance of evolutionary theory
- Mental Rotation Test (MRT): a test to measure spatial ability
- Need for Closure Scale (NFCS): a scale to assess the extent to which a person, faced with a decision or judgment, desires any answer, as compared with confusion and ambiguity
- <u>Numerical Reasoning Quiz</u>: a test to measure a candidate's numerical aptitude and their ability to interpret, analyze, and draw conclusions from sets of data
- Obsessive-Compulsive Inventory Revised (OCI-R): a self-rating scale that is designed to assess the severity and symptoms of those potentially dealing with Obsessive-Compulsive Disorder (OCD)
- Quantified-Mind Response Time: a tool that quickly, reliably, and comprehensively measures basic cognitive abilities
- Rational-Experiential Inventory (REI): a 40-item inventory that includes two main scales: Rationality (20 items) and Experientiality (20 items)
- <u>Raven's Standard Progressive Matrices (SPM)</u>: a measure to assess general fluid, nonverbal cognitive ability (US \$33-\$590.25)
- Raven Coloured Progressive Matrices (CPM): a 60-item test used for measuring abstract reasoning and regarded as a non-verbal estimate of fluid intelligence
- Reyna & Ellis Risk Task: a test to assess risk preferences through choices made in a game
- <u>Risk Propensity Scale (RPS)</u>: a 7-item questionnaire that measures general risk-taking tendencies (UP Top Pick)
- Risk-Taking Inventory (RTI): a questionnaire to assess risk preferences through self-report
- Scholastic Aptitude Test (SAT): a test to measure verbal, math, and writing skills
- Spatial Rotation Test: a test to measure spatial ability
- <u>Subjective Numeracy Scale (SNS)</u>: an assessment to measure individuals' beliefs about their mathematical skills and their preferred presentation of numerical information
- <u>Systemizing Quotient (SQ)</u>: a 75-item Likert-type measure determining how much or little the respondent is driven to analyzing and constructing systems
- <u>The Berlin Numeracy Test</u>: a new psychometrically sound instrument that quickly assesses statistical numeracy and risk literacy
- Valid or Invalid Quiz: a guiz to test judgment of whether an argument is valid or not
- <u>Vanderbilt ADHD Diagnostic Rating Scale (VADRS)</u>: a psychological assessment tool for parents of children aged 6 to 12 designed to measure the severity of Attention Deficit Hyperactivity Disorder (ADHD) symptoms
- Watson-Glaser Critical Thinking Appraisal: an assessment that contains five sections
 which are designed to find out how good an individual is at reasoning analytically and
 logically
- Young Mania Rating Scale (YMRS): a questionnaire used to measure the rating scale for mania

AUPGRADABLE

Tools

List all of the tools you might use to achieve your objectives. Below are some sample tools.

- <u>1000minds</u>
- 3,4-Methylenedioxymethamphetamine (MDMA)
- 40 Years of Zen
- Adblock Browser
- AdBlock for YouTube
- AdBlock Plus
- Adversarial Collaboration
- Aniracetam
- Anki
- Apollo
- Ayahuasca
- Biocybernaut
- Brainbuddy
- Brain Wars
- Brain Workshop
- Buddhify
- Bullet Journal
- Calibrate Your Judgment
- Calm
- <u>Cambridge Brain Sciences</u>
- Causal
- Center for Applied Rationality Workshop
- <u>Cerebrolysin</u>
- Checky
- Clearer Thinking
- Cogmed
- Cognitive-Behavioral Therapy (CBT)
- Cognitive Fun!
- Cold Turkey
- Confido Institute
- Credence Calibration Game
- Cultivate Labs
- Day One
- Daylight
- Daytum
- Decision Crafting
- Distraction Free for YouTube
- Dopamine fasting

DUPGRADABLE

- Dual-N-Back
- Easier Focus
- <u>Elevate</u>
- Evernote
- Evoke Neuroscience
- Exist.io
- Exobrain
- Expert Test
- FactCheck
- FB Purity
- Five Minute Journal
- Foc.Us
- Foci
- Focus@Will
- Focused Space
- Focusmate
- FocusMe
- Forecasting Challenges by Good Judgment Open
- Foresight
- Forest
- Freedom
- Futuur
- GBrainy
- <u>Headspace</u>
- Heyday
- Holosync
- Hypermind
- Hypnotherapy
- <u>Inqwire</u>
- Insight Timer
- Kratom
- LeechBlock
- Logseq
- <u>Lifetime Value</u>
- Lucid Dreaming
- <u>Lumosity</u>
- Lysergic Acid Diethylamide (LSD)
- MeenyMo
- Mem
- <u>Metaculus</u>
- Mindfulness App
- <u>Modafinil</u>
- Momentum Dash

DUPGRADABLE

- Motion
- Muse
- N,N-Dimethyltryptamine (DMT)
- NaturalReader
- NeoRhythm
- NeuroNation
- Neuro Fuel
- NeurOptimal
- Neurosky
- News Feed Eradicator for Facebook
- Nootroo
- Notebook
- Notecard
- Notepad
- Notifications Off
- Obsidian
- Omvana
- Onnit Alpha BRAIN
- Open Master's
- PAL
- Peak
- <u>Piracetam</u>
- Polymarket
- Post-it Note
- Postlight Reader
- Predict
- PredictionBook
- Psilocybin
- Psychedelics
- Psychology Tools
- Qbserve
- Qualtrics
- Quantified Mind
- Reflection.app
- RemNote
- Reporter
- RescueTime
- Roam Research
- Rofocus
- SciCheck
- Screen Time
- SelfControl
- Simple Habit

- Snopes
- Speeder
- StayFocusd
- Storyline
- SuperMemo
- Supernotes
- <u>Tana</u>
- Ten Percent Happier
- The Mindfulness App
- <u>TheBrain</u>
- Therapist Aid
- Thought Saver
- Thrive Away
- <u>Tide</u>
- <u>TruBrain</u>
- <u>Typeform</u>
- <u>UnDistracted</u>
- **UP Actions**
- <u>UP Assessments</u>
- <u>UP Curriculum</u>
- <u>UP Decision History</u>
- <u>UP Exocortex Design</u>
- UP Day
- <u>UP Focus Week</u>
- <u>UP Goal Predictions</u>
- <u>UP Tools</u>
- UP Wrong Record
- <u>Versus</u>
- <u>Vigo</u>
- Vitamin-R
- Waking Up
- Workflowy
- X3watch
- XMind
- Yourbiasis
- Zenobase

AUPGRADABLE

Resources

List all of the resources you might use to achieve your objectives. Below are some sample resources.

- 1 Minute Meditation
- 80,000 Hours Notes on Good Judgment and How to Develop It
- A Course in Game Theory
- Algorithms to Live By: The Computer Science of Human Decisions
- APA Dictionary of Psychology
- APA Thesaurus of Psychological Index Terms (UP Top Pick)
- Biohack Stack
- BioMindmap
- Building a Second Brain
- Calling Bullshit
- Center for Applied Rationality Handbook (UP Top Pick)
- Changing Minds (UP Top Pick)
- <u>Clearer Thinking</u> (UP Top Pick)
- Cognitive Bias Wall Poster (PDF)
- Cognitive Science: An Introduction to the Science of the Mind
- Collective Insights
- Conspiracy Chart
- Creative Thinking Tools (PDF)
- Decision Quality: Value Creation from Better Business Decisions
- Decision-making Under Deep Uncertainty
- Diagnostic and Statistical Manual of Mental Disorders
- Evergreen notes
- Every Mental Disorder Diagnosis in the DSM-5
- Evidence on Good Forecasting Practices from the Good Judgment Project: An Accompanying Blog Post
- Focusing
- Freakonomics Radio
- Game Theory 101: The Complete Textbook
- Hoffman Process
- How to Change Your Mind: What the New Science of Psychedelics Teaches Us About Consciousness, Dying, Addiction, Depression, and Transcendence
- Incremental Reading
- Introduction to Statistical Inference (Springer Texts in Statistics)
- <u>Journaling</u>
- Kialo
- Less Wrong / LessWrong Concepts Portal (UP Top Pick)
- Logical Fallacies Poster (PDF)

- Literature Review
- Making Sense with Sam Harris (UP Top Pick)
- Meaning and Argument: An Introduction to Logic Through Language
- Meditation
- Naked Economics: Undressing the Dismal Science
- Neurofeedback
- Nootropic
- Nootropics (Gwern)
- Nootropics (Sarah Constantin)
- Nootropics Reddit Beginner's Guide
- <u>Nootropics Survey 2020 Results</u> (Astral Codex Ten)
- Notion Life Design Course
- Open Philanthropy Project Efforts to Improve the Accuracy of Our Judgments and Forecasts
- Post-Mortem
- Predictably Irrational: The Hidden Forces that Shape Our Decisions (UP Top Pick)
- Pre-Mortem
- Probability and Random Processes
- Psychology Applied to Modern Life: Adjustment in the 21st Century
- Psychology Dictionary
- Rationality: From AI to Zombies (UP Top Pick)
- Smart Drugs Smart
- The Instant Economist: All The Basic Principles Of Economics In 100 Pages Of Plain Talk (book)
- The Knowledge Project (UP Top Pick)
- The Logic of Decision: Second Edition
- Theory of Games and Economic Behavior
- Therapy Sessions Recordings Database
- The Skeptic's Dictionary
- Thinking in Bets: Making Smarter Decisions When You Don't Have All the Facts
- Thinking in Systems: A Primer
- Training Course by Good Judgment
- <u>Untools</u>
- What I learned gathering thousands of nootropics ratings
- Yes/No Debate
- You Are Not So Smart: Why You Have Too Many Friends on Facebook, Why Your Memory
 Is Mostly Fiction, and 46 Other Ways You're Deluding Yourself
- You Are Not So Smart (UP Top Pick)
- Zettelkasten

Schedule

Decide on which days you will take which actions. You should add these dates to your calendar now.

- [Date]: Finalize plan
- [Dates]: Execute plan
- [Dates]: Review plan's outcomes

Predictions

Predict how well you will do in achieving your objectives.

- [Name]: I predict with [X]% confidence that I will [Y] by [Z].
- [Team Member's Name]: I predict with [X]% confidence that [Name] will [Y] by [Z].
- [Team Member's Name]: I predict with [X]% confidence that [Name] will [Y] by [Z].
- Combined: We predict with an average [X]% confidence that [Name] will [Y] by [Z].

Outcomes

Objectively record how well you achieved your objectives.

- [Date #1]: [Outcomes]
- [Date #2]: [Outcomes]
- [Date #3]: [Outcomes]
- [Date #4]: [Outcomes]
- [Date #5]: [Outcomes]
- [Date #6]: [Outcomes]
- [Date #7]: [Outcomes]
- [Date #8]: [Outcomes]
- [Date #9]: [Outcomes]
- [Date #10]: [Outcomes]

Notes

Add any random thoughts, questions, and uncertainties you may have.

- •
- •
- •

Legal

- © 2017 <u>Upgradable</u>. All rights reserved.
- We do not profit off any product recommendations.
- We declare no conflicts of interest.
- This document is not for commercial re-use.
- This document is intended only for the person it was shared with.
- Please do not share with others.