



© MIND MANAGEMENT FOR BETTER DECISIONS

How to avoid costly judgments from mental deception in everyday life

A multi-part, 36-hour program designed to provide individuals and groups the skills to make more accurate decisions in their business, professional, and personal lives. A participatory instruction style emphasizes the reduction of false certainty that can so easily lead to cognitive mistakes and mental blunders.

**Don't let a quest
for certainty
lead you astray!**

What dangers arise
from our search for
closure?

Why do we 'seize and
freeze' on sparse
information?

How can we improve
the accuracy of our
everyday decisions?

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*Course location/dates
tailored to attendees*

“Don’t let your quest for certainty lead you astray!”

© ***Mind Management for Better Decisions***

A multi-part, 36-hour course of instruction on how to avoid costly judgments from the mental deception caused by cognitive mistakes

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Goal – To improve accuracy in our individual and collective decisions by reducing false certainty that leads us into cognitive mistakes and mental blunders.

Module 1: Prologue to cognitive aptitude. Our opening session sets the stage by examining cognitive bias and logical fallacy as constituting a surprisingly large set of systematic errors that can prevent correct perceptions from being properly vetted by our minds. We review the direct harms that arise from our not recognizing these gaffes, and we use a range of participatory exercises designed to focus trainees on how such bias can lead us all astray from accurate or rational decisions across a broad spectrum of human activity. Cognitive biases from different categories of mental error are surveyed with engaging illustrations, all the while stressing a common link to our innate need to reach certainty (“cognitive closure”), a process achieved largely through the unconscious mental process of “seizing and freezing.” Available also as stand-alone instruction, this introductory session furnishes participants with the basic aptitude for understanding cognitive

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function and its associated psychological terminology. Like the rest of the course, our instruction features interactive and participatory exercises, multi-media presentations, competitive games, critical reading, and group discussions. 4 hours.

Module 2: Handling too much information – part A. Mistakes in our thinking often arise if we notice things that merely differ with those already primed in our memory or when things are simply repeated over and over again. This instructional module thus scrutinizes the role of *availability heuristics*, *frequency illusion*, *omission bias*, and *base rate fallacy*. We emphasize how the individual mind reaches first (and usually most forcefully) for what is nearest at hand to explain any new information that it receives. We then switch later in the session to cover how we notice flaws in other people more than the same flaws expressed in ourselves, encompassing the illusions caused by *bias blind spot*, *naïve realism*, and *naïve cynicism*. 4 hours.

Module 3: Handling too much information – part B. An important class of cognitive error stems from our mind's heightened alertness whenever we notice that something has changed from a prior (and usually unconscious) base position that we happen to already hold. Errors from the *anchoring bias*, *Bayesian conservatism*, and the *framing effect* are covered thoroughly in this session. In addition to several participatory exercises, we use various readings from real life to reveal startling examples of misleading shortcuts that

altered the outcomes of history, media and communications, politics, even environmental conservation, sometimes with deadly consequences. Lastly, we investigate how to detect and avoid being led astray by the *equivalency bias* and *equality bias*, especially in the fields of media and communications. 4 hours.



Module 4: Handling too much information – part C. Another relatively large class of mental mistakes that fall within this “too much information” category are ones

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caused by our tendency to be drawn most strongly to the details that confirm our own pre-existing beliefs. With a variety of exercises, games, and competitions set up among the course participants, we will scrutinize the gaffes that are caused by *confirmation bias*, *congruence bias*, *observer-expectancy effect*, and *outcome reporting bias*. These errors are especially problematic in the fields of environmental management, wildlife conservation, and the natural sciences, even to include scientific research and public policy. Real-world examples that treat these biases will help us better prevent falling to the seductive power of undue suggestion. 4 hours.

Module 5: Not having enough meaning – part A. We rarely find all of the information that we'd like to have before making decisions, and such information is often notably meager. This session will treat what happens when we tend to form stories and establish patterns even when looking at very sparse data. Our exercises and readings emphasize in particular how the mind treats information that is largely numerical in form. We will see how *insensitivity to sample size* can lead us astray, as well as our tendency to fall more broadly to the *neglect of probability* in all fields of human endeavor. The session also covers *illusion of validity*, *recency illusion*, *gambler's fallacy*, and *illusory correlation*, including the especially sinister version of the latter, the dreaded 'one-shot' *illusory correlation*. 4 hours.

Module 6: Not having enough meaning – part B. We are generally inclined to fill in missing information based on stereotypes, generalities, and our prior experience. Here we learn about the dangers posed by another class of mental mistakes: *group* and *ultimate attribution errors*, *authority bias* (*argument from authority*), *bandwagon effect*, *out-*

group homogeneity and *in-group biases*, as well as the easily grasped



well-traveled road effect. Our exercises and readings in this session

© J. Christopher Haney and Tim Ward will underscore how our minds do not simply exist in a social vacuum, but rather they always operate within the unique context of the particular groups and social identities that we just happen to inhabit (or with which

we are most familiar). This particular training session thus puts an important emphasis on the effects that our social and individual experiences have on our psychological conditioning. 4 hours.

Module 7. Our need to act quickly. Typically before we take action or ever make decisions, we must be confident that we can make an impact and also feel that what we are doing is fundamentally important. Taking another journey into the vast network of social identities that so influence our individual psychology, this lesson will scrutinize the gaffes caused by *fundamental attribution error*, *false consensus effect*, *illusory superiority*, *illusion of control*, *over-confidence effect*, *Lake Wobegon effect*, and the outsized penalties from the *Dunning-Kruger effect*. Another way we try to finish mental tasks is to complete things that we've invested time and energy in. This makes us prone to the *backfire effect*, *zero-risk bias*, *irrational escalation*, and the *sunk cost fallacy*. 4 hours.

Module 8. What should we really remember? Modern life is full of data that comes at us fast and relentlessly. How do we decide ultimately what is best to remember? This part of our course examines how our minds store memories and patterns. When we try to reduce lots of information just to key elements we can fall to the cognitive traps of *peak-end rule*, *leveling and sharpening*, *serial recall* and *position effects* (including both *recency* and *primacy effects*), and the *list-length effect*. In other situations,

we store our memories very differently based on how they were experienced by us at the time. This tendency can make us vulnerable to *testing*, *next-in-line*, or *tip-of-the-tongue effects*.

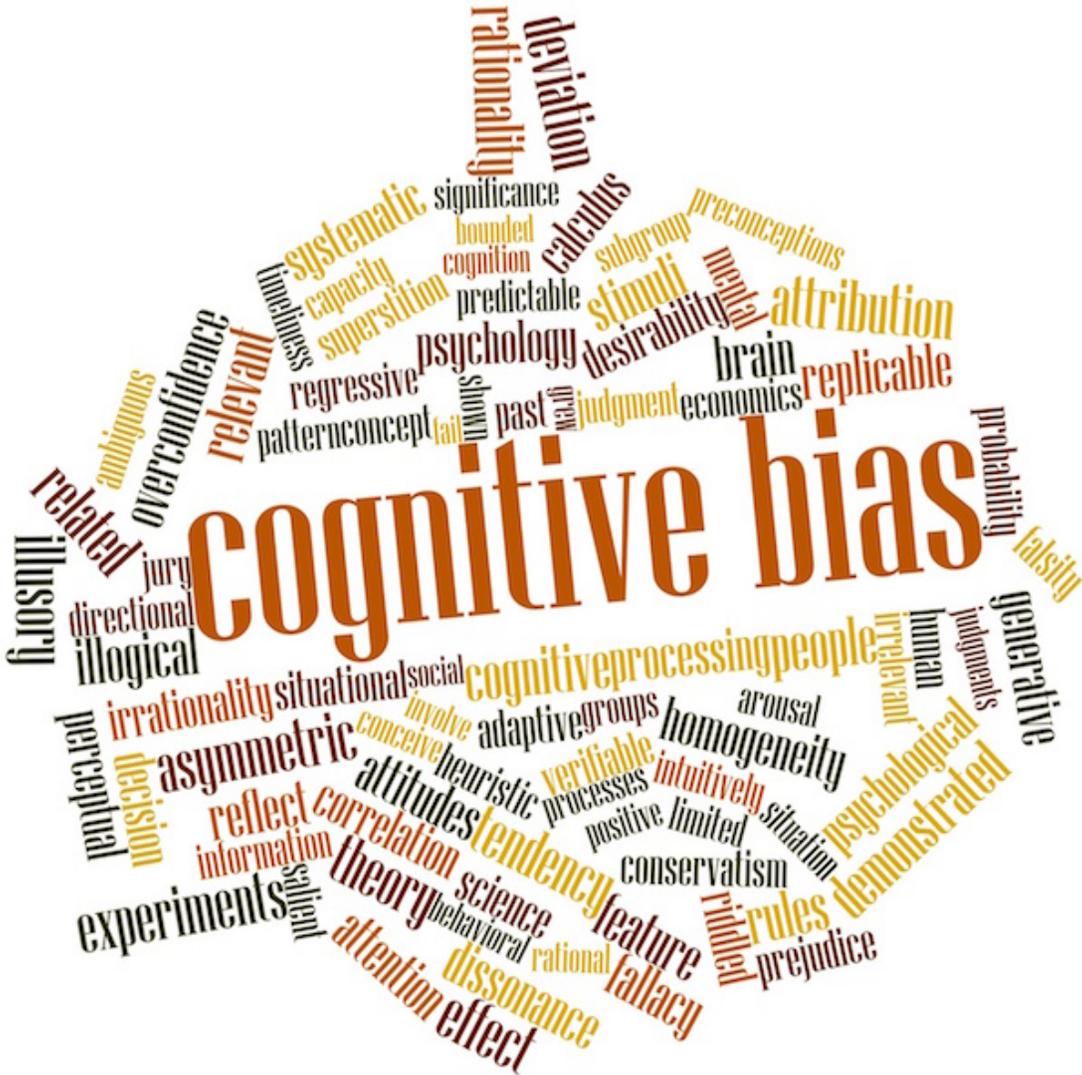


This session will wrap up our broad survey of how to identify and then guard against particular cognitive

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biases and fallacies. We then segue
way into how to prevent these errors

from exerting undue power in the first
place. 4 hours.

Module 9: Proactive steps for accurate decisions. All is not lost. Managing our mind for better decisions, and safeguarding against behavioral biases, can be accomplished through a variety of mental exercises. In this session we will learn how to use such safeguards as *focusing on the data, seeking out contrary information, building in accountability measures, focusing on process, avoiding the noise,* and various other practices that minimize our mental gaffes. In this session we will also ask for course attendees’ reactions to the training instruction using both a written questionnaire and an open discussion. 4 hours.



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Target participants: Groups, teams, and individuals who work inside any professional discipline where management, supervision, or decision-making are key job requirements. This course will also enhance the abilities of those who rely on *structured decision-making*. © ***Mind Management for Better Decisions*** will benefit professionals working in such diverse fields as environmental and natural resource management, conservation, research, public policy, education, economics, and international affairs and finance.

Course prerequisites: None. Participants will be furnished with all of the instructional resources necessary to comprehend the material.

Course format: An emphasis is placed on interactive and participatory exercises, multi-media presentations, competitive games set up among course attendees, critical readings, and group discussions.

Number of course participants: A minimum of 10 to a maximum of 25 participants can be accommodated.

Texts and additional resources:

Banaji, M.R., and A.G. Greenwald. 2013. *Blindspot: Hidden Biases of Good People*. Delacorte Press.

Brockman, J. 2013. *Thinking: The New Science of Decision-Making, Problem-Solving, and Prediction*. Harper Perennial.

Dobelli, R. 2013. *The Art of Thinking Clearly*. Farrar, Straus and Giroux.

Hand, D.J. 2014. *The Improbability Principle: Why Coincidences, Miracles, and Rare Events Happen Every Day*. Farrar, Straus and Giroux.



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Kahneman, D. 2011. *Thinking, Fast and Slow*. Farrar, Straus and Giroux.

Novella, S. 2012. *Your Deceptive Mind: A Scientific Guide to Critical Thinking Skills*.
The Great Courses.

Plous, S. 1993. *The Psychology of Judgment and Decision Making*. McGraw-Hill
Education.

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Science driven solutions for land or sea

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