

Index

A

Abdominal breathing, 394
Acceleration, 4
Acetylcholine, 165
Active-control experiments, 246
Adaptive function, 255
Adelard of Bath, 8
Advaita Vedanta, 60, 61
Affiliation system, 166
Alchemy, 263
Alerting, 146
Alpha, 68, 158
Alpha coherence, 68
Amygdala, 48, 158
Anchor, 139
Anterior cingulate cortex (ACC), 160
Anterior insula, 82
Anterior nucleus, 39
Antonovsky, A., 317
Anxiety, 155, 333, 335, 336
Appearance, 72
Appetitive drives, 50
Approach system, 166
Aristotle, 8
Aron, 178
Artefacts, 101
Atman, 320, 327
Attention, 213, 329
 network, 78
 regulation, 2, 140, 142, 201–202
Attentional changes, 249
Attentional disengagement, 87
Attitude, 142
Authentic compassion (*karuna*), 37
Authenticity, 162
Autonomic functions, 157

Avoidance system, 166
Awareness, 320
Awareness of emptiness, 256
Ayurveda, 320, 321, 323, 325, 354,
 355, 358, 359

B

Bacon, F., 9
Bacon, R., 8, 9
Badawi, K., 68
Balance, 322, 329, 333, 336, 340,
 347, 355, 359
Band power, 101
Bare awareness, 24
Basal gangli, 24
BDNF. *See* Brain-derived neurotrophic
 factor (BDNF)
Behavioral equation, 324, 349
Benson meditation, 154
Berzin, A., 139
Bhagavad-gita, 325, 336, 341, 352,
 355, 356, 358
Bhavana, 139
Bias, 72
Bildung, 383
Body
 awareness, 201–204
 scan, 143, 150, 394
 states, 203, 206
Bottom-up, 25, 80
Brain, 9, 12–14
Brain-computer interfaces, 14, 111
Brain-derived neurotrophic
 factor (BDNF), 165
Brentano, F., 10, 12

Bryant, E.F., 321, 325, 326, 353, 354,
357–359
Buber, M., 176
Buddha, 280–283, 284, 286, 287, 290, 294
Buddhism, 98, 271–294
Burnout, 340, 359

C

Capacity(ies), 246, 249, 250
Cardiovascular diseases, 155
Categories of meditation, 24–25
Chalmer's, 14
Chameleon effect, 180
Ch'an, 139
Character strengths, 318
Choiceless awareness, 24, 143
Christian mystical tradition, 138
Cingulate gyrus, 39
Cingulum, 160
Classical system, 14
Classroom setting, 384
Clinical effectiveness, 3
Cogito, 62, 63
Cognitive attention, 381
Cognitive science, 12
Coherence, 162, 374
Communication, 343
Compassion, 161, 180, 185
Complementarity, 13–15
Complementary, 14
Comprehensive ontological naturalism, 307
Concentration, 329
Concept, 301
Conception, 301
Consciousness, 9, 11–13, 15, 17, 20,
24, 96, 320
Consortium, 72
Contemplative enquiry, 267
Contemplative science, 1, 14, 18, 20, 245, 257
Context of meditation, 142
Core self, 179
Cornelissen, R.M.M., 318
Cortex, 158
Cortical midline, 177
Countertransference, 11
Creative thinking, 381
Cross-cultural, 273, 288, 292, 293
Cycles of scientific inquiry, 256

D

Dalai Lama, 70, 138
Damasio, A.R., 179
Decentering, 184

Decety, J., 180
Deeper meaning, 253–256
De facto *evidence*, 304
Default, 31
Default mode, 177
Default mode network (DMN), 12, 15, 78,
219, 232
Depression, 155, 333, 335, 336
Descartes, R., 62–66, 139, 274
Detachment, 143
Dhyāna, 139
Diener, E.D., 318
Dis-identification, 162
Distractions, 146
Distress Levels Among German Students
and Teachers, 385–387
DMN. *See* Default mode network (DMN)
Dopamine, 165
Dorsal attention system, 25–28, 146
Dorsal egocentric processing stream, 26
Dorsal pulvinar nucleus, 39
Dorsal striatum, 44
Doshas, 321
Dualism, 14

E

Eberth, J., 318
Education, 381
Educational sciences, 382
EEG. *See* Electroencephalographic (EEG)
Effective evidence, 304
Ego, 59, 61–63, 65, 66, 70
Electroencephalographic (EEG), 95, 188, 365
Electromyographic (EMG), 102
Emotional contagion, 180
Emotional shift, 384
Emotional variables, 332–336
Emotion regulation, 201, 204–205
Empathy, 37, 161, 180, 381
Empirical method, 8
Emptiness, 60, 248
Endogenous morphine, 165
Engle, A., 138
Enlightenment, 10
Enlightenment and post-modernism, 305
Entanglement, 264
Epinephrine (E), 165
Epistemological naturalism, 310
Epistemological questions, 302
Epistemology, 13, 15–20
Epoché, 11
Ethical competence, 381
Event-related meditation, 105–110
Event-related potentials (ERP), 188

Evidence-informed medicine, 266
 Evolutionary psychology, 18
 Excitement, 88
 Executive network, 78
 Experience(s), 8, 277
 Experiencer, 300
 Experiment, 8
 Extended educational paradigm, 387
 Extended or flexible ontological
 naturalism, 308

F

Fano factor, 372
 Farrow, J.T., 68
 Fast Fourier Transform (FFT), 99
 Fear, 36
 Feuerstein, G., 318
 FFT. *See* Fast Fourier Transform (FFT)
 First person approach, 2
 First-person information-gathering, 71
 First-person investigator, 70
 First-person methods, 212
 First person perspective, 2, 7, 9, 15, 143
 Flourish(ing), 282–286, 288, 290, 294
 Flow of time, 200
 fMRI signals, 46
 Focus attention (FA), 142, 143
 meditation, 77
 40 Hz oscillation, 158
 Foundationalism, 275
 Four immeasurables, 185
 Frankl, V.E., 17
 Frawley, D., 322, 325, 352, 354, 355, 357–359
 Fredrickson, B.L., 318
 Fred v. Allmen, 145
 Freiburg Mindfulness Inventory (FMI), 97
 Freud, 11, 266
 Functional connectivity, 41, 86
 Functionalist approach, 250
 Fusiform gyrus (FG), 44

G

GABA. *See* Gamma-aminobutyric acid
 (GABA)
 Gallese, V., 180
 Gamma, 69
 activity, 100–105
 oscillations, 97
 synchrony, 69
 waves, 158
 Gamma-aminobutyric acid (GABA), 42
 German pedagogical concepts, 384

Global binding, 159
 Globus pallidus, 44
Gnostic, 263
 Grasping, 183
 Grosseteste, R., 8
 Guided Imaginations, 394
Gunas, 319–321–327, 331, 333, 336, 345,
 346, 348, 349, 352, 355, 360

H

Habits, 44
 Habitual patterns, 253
 Happiness, 156, 320, 332, 334, 335, 357
 Health, 306, 317, 319, 323, 346, 347, 349,
 350, 355, 356
 Health psychology, 319, 323
 Heartbeat detection, 251
 Hebert, J.R., 68
 Hermeneutics, 20
 Hippocampus, 48, 157
 Humboldtian tradition, 383
 Hume, D., 62, 64–67
 Husserl, E., 11, 12, 176
 Hypnotic suggestion, 222

I

I-Me-Mine, 36
 Immune diseases, 155
 Incompatibility, 14
Independent self construal, 178
 Indian psychology, 318, 321, 324
 Individual experience, 96
 Individuality, 61
 Inner awareness, 58
 Inner experiences, 7, 8, 10, 12, 14–20
 Insight(s), 7, 10, 11, 13, 16, 17, 19,
 20, 50, 248
 Insight meditation, 141, 143
 Instruments, 71
 Insula, 203, 206
 Insular cortex, 157, 203
 Intentions, 246
 Interdependent self construal, 178
 Interdisciplinary, 4
 Interoception, 160, 251, 252, 255
 Interoceptive attention, 252
 Interoceptive awareness, 253
 Intersubjectivity, 19
 Introspectionism, 11, 12
 Introspective, 2
 Intuition, 160
 Invulnerability, 322

J

James, W., 177
 Jesuit tradition, 138
Jhāna, 139
 Jung, C.G., 266
Just This, 53

K

Kabat-Zinn, J., 148
 Kant, I., 62, 64–67
 Kepler, H., 16
 Kindling motivation, 391–392
 Knowledge, 275–278, 283
 Koan, 145

L

Larson, G.J., 320–322, 325
 Lateral dorsal nucleus, 39
 Lateral posterior nucleus, 39
 Laxity, 88
 Levels of mind, 59
 Lifestyle, 306, 323, 350, 352–354, 357
 Limbic system, 161
 Logic relaxation, 139
 Loving-kindness, 185
 Loving-kindness meditation (LKM),
 183, 318
 Low-level chemiluminescence, 370
 Lutz, A., 69

M

Magnetic resonance imaging (MRI), 116
 Maharishi Mahesh Yogi, 60, 63
 Mahayana, 61
Maitrī, 185
 Manifold, 65
 Mantra, 145
 Mantra meditations, 154
 Maps of consciousness, 58
 Markers, 70
 Markers of experiences, 70
 MBSR. *See* Mindfulness based stress
 reduction (MBSR)
 Meaning-making, 17
 Mechanisms of change, 245
 Medial dorsal nucleus, 39
 Medial prefrontal cortex, 48, 78
 Meditation, 58, 95–112, 115–133, 272, 273,
 276–286, 288–294, 354, 356, 360, 366
 definition, 138, 139
 motivation scale, 147

proficiency, 98
 research consortium, 72
 session, 107
 Meditation training (MT), 243
 Meditators, 98, 102
 Melatonin, 165
 Memory, 327
 Meta-awareness, 212, 250
 Meta-paradigms, 266
Metaphysical anti-realism, 301
 Meta-theoretical level, 269
 Methodological naturalism, 309
 Methodology, 58
Metā, 185
 Metta meditation, 150
 Middle ages, 265
 Mind, 11–13, 15, 16, 320, 326, 357
 Mind and life dialogues, 138
 Mind-body connection, 161
 Mindful dialogue, 395–396
 Mindfulness, 3, 11, 13, 20, 108, 155,
 282–285, 322
 Mindfulness based stress reduction (MBSR),
 3, 49–50, 141, 156, 244
 Mindfulness in Schools (MISCHO) Program,
 381, 387–390
 Mindfulness meditation (MM), 183–184,
 291, 318
 Mindlessness, 383–384
 Mind wandering, 15, 46, 78, 144, 216
 Minimal dose, 246
 Minimalist ontological naturalism, 308
 Minimal self, 179
 Monitoring, 111
 Monkey-mind, 26
 Morbidity, 154
 Morphometric, 141
 Mortality, 154
 Motivation, 142, 247
 Motivational variables, 336–341
 Motivation of meditation, 147
 Motivations for practice, 247
 Motives, 337
 Murthy, P.K., 319, 320, 323
Mu-shin, 34
 Mystical experiences, 272, 276–279, 287,
 288, 293
 Mysticism, 10, 273

N

Naïve or metaphysical realism, 301
 Nature, 9, 14
 Neglect of experience, 1

- Neocortex., 303
 Neurodegenerative diseases, 155
 Neuroimaging, 115–133, 212
 Neurophenomenology, 76
 Neurophenomenology, 14, 211–213
 Neurophysiology, 107–110
 Neuroplasticity, 115–133
 Neuroscience, 12, 272, 285–286–288, 294
 Neuroticism, 331, 332, 335
 NFkappaB, 165
 Nisbett, R., 273, 275
 Nitric oxide, 45, 165
 Noise-cancelling electronic headphone, 43
 No-mind, 34
 Non-analytical way, 142
 Non-being, 60
 Non-classical system, 14
 Non-distraction, 227
 Non-locality, 264
 Norepinephrine (NE), 165
- O**
 Object-based, 41
 Ontological dualism, 15
 Ontological monism, 14
 Ontological naturalism, 307
 Ontological questions, 302
 Ontology, 13, 14
 Open monitoring, 143
 Orbitofrontal cortex, 157
 Orienting and executive attention, 146
Other, 176
 Oxford, 8
 Oxidative stress, 375
 Oxytocin, 166
- P**
 P300, 188
 Paranjpe, A.C., 318
 Paris, 8
 Passage of time, 200, 202–206
 Patanjali, 352, 353, 355–358
 Pauli, W., 266
 Pedagogy, 382, 384
 Perception, 275–278, 289, 327
 Personal growth, 154
 Personality, 317, 319, 321, 322, 331, 332
 Phasic deactivation, 31
 Phenomenal experience, 1
 Phenomenal manifold, 64, 65
 Phenomenological experiments, 392–393
 Phenomenological manifold, 59
 Phenomenological map, 61
 Phenomenology, 11, 212
 Philosophy, 8, 10, 12
 Photomultiplier, 373
 Photon clustering, 372
 Physiological markers, 68, 70
 Physiological resilience, 247
 Pico della Mirandola, 9
 Pilot Evaluation Study of MISCHO, 397–398
 Plasticity, 84
 Pleasure system, 166
 Positive psychology, 156, 353
 Posterior cingulate cortex (PCC), 162
 Power spectral density (PSD), 99–110
 Practice time, 84
 Pre-attention, 30
 Precuneus, 39
 Prefrontal cortex (PFC), 160
 Present moment, 200–202, 204, 206
Programme for International Student Assessment (PISA), 386
 Proinflammatory diseases, 155
 Pseudo-science, 267
 Psyche, 24, 320, 322, 323, 348, 354
 Psychoanalysis, 11
 Psychognosia, 10
 Psychological disease, 318
 Psychological illness, 346
 Psychology, 10, 11
 Psychoticism, 332
 Public goods, 264
 Pulvinar, 23
 Pure, 58
 consciousness, 59, 60, 64–68
 ego, 61
 emptiness, 59, 60, 68
 individuality, 59, 61, 64, 68
Purusha, 320, 353
 Puta, M., 317
- Q**
 QEE, 97
 Qualitative study, 3
 Quiet ego, 182
- R**
Rajas, 306, 317, 320–324, 327, 331, 332, 335, 336, 341, 345, 348–350, 352–356, 359
 Rapture, 159
 Razumnikova, O.M., 68
 Reactive oxygen species (ROS), 365
 Reality, 272, 275, 276, 278, 284

- Real-time state monitoring, 110
 Relational self, 178
 Relaxation, 154
 Relaxation response, 155
 Reperceiving, 184
 Respiration, 68
 Response inhibition, 255
 Resting state, 86, 103
 Retrosplenial cortex, 39
 Reward systems, 164
 Rinpoche, S., 61, 70
 Römer, H., 13, 14
 Rumination, 155
- S**
- Saint Augustines, 139
 Saint Bonaventure, 8
 Saint Catherine of Genoa, 298
 Saint Francis of Assisi, 297
 Saint Giles of Assisi, 10
 Saint Ignatius of Loyola, 138
 Saliency network, 78
 Salzberg, S., 187
Samādhi, 16, 143
Samatha, 141
Sankhya, 319, 320, 325
 Satisfaction, 324, 332, 334, 335, 353, 357
Satori, 24
Sattva, 306, 317, 320–324, 326, 327, 332, 335, 336, 345, 346, 349, 350, 352–354, 356, 358, 359
 Sayadaw, M., 249
 Schleiermacher, F., 20
 School
 - education, 382, 384
 - settings, 381
 - teachers, 381
 Science, 8–10, 16, 19, 20
Scientism, 264
 Secularized, 4
 Sedlmeier, P., 317, 318
 Self, 24, 60, 61, 63–66, 176, 273, 279, 280, 283, 284, 290, 293, 294
 Self awareness, 162
 Self centered frames of reference, 28
 Self centeredness, 183
 Self compassion, 182
 Self concept, 176
 Self construal, 178
 Self-efficacy, 326, 357
 Self exploration, 147
 Self focus, 139
 Selfless, 24
 Selflessness, 53, 183
 Self other connectedness, 176, 182–183
 Self regulation, 4, 147, 381
 Self relevance effect, 188
 Self transformation, 147
 Seligman, M.T., 318
 Semi-automatic process, 144
 Semiotic, 17
 Sense of coherence (SOC), 268
 Sensorimotor cortex, 251
Šgom, 139
 Shapiro, D.H., 140, 142
 Shapiro, S., 148
 Shared networks, 180
 Shear, J., 61, 145
 Shilpa, S., 321
 Silence, 47
 Sims, N., 66
 Sitamma, M., 322, 330, 345, 348, 352
 Sitting meditation, 393–394
 Sleep, 347
 Soma, 24
 Soul, 320, 322, 326, 327, 335, 354, 355
 Spirit, 306, 319, 326
 Spiritual awareness, 354, 355, 358
 Spiritual experience, 164
 Spirituality, 266, 317, 326, 327, 336, 339, 341, 354
 Sri Aurobindo, 355
 Stages of meditation, 248
 Standard model of scientific enquiry, 267
 State, 322
 State monitoring, 100
 State monitoring device, 111
 States of consciousness, 105
 Stress, 154, 327, 356
 - reduction, 154
 - response, 367
 Subgenual anterior cingulate, 50
 Subjective experiences, 107
 Subjective input, 81
 Suffering, 248, 256
 Suggestion, 217
 Superior parietal lobule, 39
 Supernaturalism, 311
 Suspension, 68
 Sustained attention, 146
 Suzuki, D.T., 278, 279, 283–285, 290
 Synchronicity, 267
 Synchronization, 159
 Systems of attention, 24–25

T

Tamas, 317, 320–324, 331, 332, 335, 336, 341, 345, 348–350, 352–354, 356, 359, 360
 Taoism, 60
 Task negative, 30
 Task positive network, 232
 Teaching MISCHO to Different Age Groups, 397
 Telomerase, 268
 Temporality, 200, 204
 Temporoparietal junction (TPJ), 162, 180
 Thalamus, 23
 Theology, 8, 9, 20
Theory of Mind, 303
 Theravada, 61
 Theta band, 159
 Third person approaches, 1
 Third person perspective, 7, 9, 15, 143
 Thompson, E., 179
 Tibetan, 61, 70
 Tibetan Buddhism, 60, 139
 Tibetan Buddhist, 69
 Tibetan Buddhist meditation, 141
 Time perception, 200–202, 204, 205
 Tonic deactivation, 31
 Top down, 24, 80
 Thought Translation Device (TTD), 111
 Training related changes to the attention, 255
 Trait(s), 322, 323, 353
 Transcendence, 154
 Transcendental consciousness, 16
 Transcendental meditation (TM), 68, 154, 365
 Transcendental monism, 15
 Transference, 11
 Travis, F.T., 68
 Tri-guna, 306, 317–323, 325, 349
 Tryptophan, 165

U

Ultimate reality, 272, 278, 279, 283, 286, 290, 299
 Ultra-weak photon emission (UPE), 365
 University education, 382
 Unmediated cognitive experience, 278
 Unmediated experience, 274, 276
 Upanishads, 139

V

Values, 18
 Varela, F.J., 138, 212
 Vedanta, 12, 16, 59, 60, 65, 320
 Vedas, 318
 Ventral allocentric processing stream, 26
 Ventral attention system, 27, 146
Ventral striatum, 44
 Vigilance, 146
 Vipassana, 141, 143
 Virtues, 318, 349, 351, 355, 359, 360
 Visualization, 111, 145
Visuddhimagga, 249
 Void nature, 3
 Volition, 337

W

Walach, H., 144
 Wallace, A., 60
 Wallace, B.A., 145
 Wallace, R.K., 68
 Well-being, 306, 317, 318, 320–323, 333, 334, 346, 349, 352, 353
 Westhoff, L.J., 324, 348
 Width of attention focus, 145
 Wisdom, 20, 185
 Witness consciousness, 11, 16
 Wolf, D.B., 319, 332, 357
 Work with Cognitive Patterns, 395

Y

Yerkes-Dodson law, 385
 Yoga, 12, 59–61, 65, 68, 319, 350, 352, 353, 355, 356
Yoga Sutras, 325, 353, 355, 359

Z

Zajonc, A., 267
 Zanmai, 16
 Zazen, 141, 154
 Zen, 16, 24, 60, 68, 139, 141
 Zen (Austin), 60
 Zen Buddhism, 25