

Appendix 1. Database searches

PubMed Search hits = 4,407 (2,409 after limiters and 'NOT's applied)

S17	#16 AND (dementia[Title] OR Alzheimer*[Title])
S16	#13 AND #14 AND #15
S15	#10 OR #11 OR #12
S14	#3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9
S13	#1 OR #2
S12	(((("non drug therapy"[Title/Abstract]) OR "non-drug therapy"[Title/Abstract]) OR "non-drug interventions"[Title/Abstract]) OR "non drug interventions"[Title/Abstract]) OR "non-pharmacological"[Title/Abstract])
S11	Search (((((((((((((((((((multifactor*[Title/Abstract]) OR multimodal[Title/Abstract]) OR "complex intervention"[Title/Abstract]) OR multidomain[Title/Abstract]) OR multi-domain[Title/Abstract]) OR multi-component[Title/Abstract]) OR multicomponent[Title/Abstract]) OR multiple-modalit*[Title/Abstract]) OR multi-modality[Title/Abstract]) OR mind-motor[Title/Abstract]) OR *holistic[Title/Abstract]) OR dual-task[Title/Abstract]) OR mind-body[Title/Abstract]) OR cognitive-physical[Title/Abstract]) OR cognitive-motor[Title/Abstract]) OR "programmatic approach"[Title/Abstract]) OR personalized[Title/Abstract]) OR "multiple modalities"[Title/Abstract]) OR "intervention program*[Title/Abstract]) OR combined[Title/Abstract]) OR plus[Title/Abstract]) OR program[Title/Abstract]) OR programme[Title/Abstract]
S10	Search ((((((multimodal treatment[MeSH Terms]) OR combined modality therapies[MeSH Terms]) OR therapies, combined modality[MeSH Terms]) OR mind body therapy[MeSH Terms])))
S9	Search (((((((("Dementia/diet therapy"[Mesh]) OR "Dementia/therapy"[Mesh]) OR "Dementia/rehabilitation"[Mesh]) OR "Alzheimer Disease/diet therapy"[Mesh]) OR "Alzheimer Disease/prevention and control"[Mesh]) OR "Alzheimer Disease/rehabilitation"[Mesh]) OR "Alzheimer Disease/therapy"[Mesh]))))
S8	Search (((((((((((((((((((("Exercise Therapy"[Mesh]) OR "Exercise Therapy/methods"[Mesh]) OR "Resistance Training/methods"[Mesh]) OR "Resistance Training/therapeutic use"[Mesh]) OR "Cognitive Therapy"[Mesh]) OR "Cognitive Therapy/methods"[Mesh]) OR "Combined Modality Therapy"[Mesh]) OR "Cognition Disorders/prevention and control"[Mesh]) OR "Humans/rehabilitation"[Mesh]) OR "Humans/therapy"[Mesh]) OR "Physical Stimulation/methods"[Mesh]) OR "Physical Stimulation/therapeutic use"[Mesh]) OR "Physical Stimulation/therapy"[Mesh]) OR "Horticultural Therapy/methods"[Mesh]) OR "Horticultural Therapy/therapy"[Mesh]) OR "Resistance Training"[Mesh]) OR "Cognitive Dysfunction/rehabilitation"[Mesh]))))
S7	Search (((((((treatment[Title/Abstract]) OR therapy[Title/Abstract]) OR program*[Title/Abstract]) OR strategy[Title/Abstract]) OR reversal[Title/Abstract]) OR enhancement[Title/Abstract]) OR intervention[Title/Abstract]))
S6	Search (("therapeutic approach"[Title]) OR "therapeutic system"[Title]) OR stimulat*[Title]) OR "metabolic enhancement"[Title]) OR rehabilitation[Title]) OR "brain training"[Title]) OR "brain gym"[Title]) OR mind-body[Title]) OR "mind body"[Title]) OR "green gym"[Title]) OR "physical activity"[Title]) OR activiti*[Title]) OR therap*[Title]) OR psychotherap*[Title]) OR exercis*[Title]) OR aerobic*[Title]) OR "resistance training"[Title]) OR "strength training"[Title]) OR dancing[Title]) OR music[Title]) OR yoga[Title]) OR meditation[Title]) OR diet[Title]) OR nutri*[Title]) OR vitamin*[Title]) OR herb*[Title]) OR "medicinal plant"[Title]) OR "medium-chain triglycerides"[Title]) OR MCTs[Title]) OR outdoor*[Title]) OR garden*[Title]) OR horticultur*[Title]) OR "Chinese medicine"[Title]) OR tai-chi[Title]) OR taichi[Title]) OR mah-jong[Title]) OR mahjong[Title]) OR "lifestyle change"[Title]) OR "lifestyle activit*[Title]) OR "transcranial magnetic stimulation"[Title]) OR prevention[Title]) OR cycling[Title]) OR training[Title]) OR interaction[Title]))))
S5	Search (((((((("cognitive stimulation"[Title/Abstract]) OR "cognitive enhancement"[Title/Abstract]) OR "cognitive intervention"[Title/Abstract]) OR "cognitive training"[Title/Abstract]) OR "cognitive rehabilitation"[Title/Abstract]) OR "cognitive function"[Title/Abstract]) OR "cognitive therapy"[Title/Abstract]) OR "brain stimulation"[Title/Abstract]))

S4	Search (((((((((((("Deep Brain Stimulation") OR "Transcranial Magnetic Stimulation") OR "Electric Stimulation Therapy") OR "Physical Stimulation") OR "Self Stimulation") OR "Transcranial Direct Current Stimulation") OR "Transcutaneous Electric Nerve Stimulation") OR "Subliminal Stimulation") OR "Electric Stimulation") OR "Acoustic Stimulation") OR "recreation* therapy") OR "cognitive therapy") OR "cognitive function") OR "cognitive rehabilitation") OR "neuropsychological rehabilitation") OR "dual task") OR "brain training")
S3	Search (treatment[Title/Abstract] OR therapy[Title/Abstract] OR program*[Title/Abstract] OR strategy[Title/Abstract] OR reversal[Title/Abstract] OR enhancement[Title/Abstract] OR intervention[Title/Abstract])
S2	Search (dementia[Title/Abstract] OR alzheimer's[Title/Abstract] OR alzheimer*[Title/Abstract] OR "cognitive impairment"[Title/Abstract] OR "memory loss"[Title/Abstract] OR "memory problem"[Title/Abstract] OR "cognitive decline"[Title/Abstract] OR "cognitive complaint"[Title/Abstract])
S1	Search (((("Dementia"[Mesh]) OR "Alzheimer Disease"[Majr]) OR "Neurodegenerative Diseases"[Majr:NoExp]) OR "Neurocognitive Disorders"[Majr]))

PsycINFO hits = 2,866 (2,683)

S12 S7 AND S8 AND S11

S11 S9 OR S10

S10 AB ("non drug therapy" or "non-drug therapy" OR "non-drug interventions" OR "non drug interventions" OR "non-pharmacological") OR TI ("non drug therapy" or "non-drug therapy" OR "non-drug interventions" OR "non drug interventions" OR "non-pharmacological")

S9 TI (multimodal OR "multifactorial intervention" OR multidomain OR multicomponent OR mind-motor OR holistic OR wholistic OR "dual task" OR cognitive-physical OR "cognitive motor" OR "multiple modalities" OR combined) OR AB (multimodal OR "multifactorial intervention" OR multidomain OR multicomponent OR mind-motor OR holistic OR wholistic OR "dual task" OR cognitive-physical OR "cognitive motor" OR "multiple modalities" OR combined OR "mental and physical" OR "comprehensive treatment program")

S8 S3 OR S4 OR S5 OR S6

S7 S1 OR S2

S6 TI (exercise OR "Aerobic Exercise" OR "Weightlifting" OR "Yoga" OR "Mediterranean diet" OR Massage OR nutrition OR vitamin OR herb* OR "medicinal plant*" OR "medium chain fatty acids" OR "medium chain triglycerides" OR outdoors OR outside OR nature OR gardening OR "chinese medicine" OR mahjong OR "tai chi" OR taiji OR "tai ji" OR tai-ji OR "lifestyle changes" OR "lifestyle modification" OR "lifestyle choices") OR AB (exercise OR "Aerobic Exercise" OR "Weightlifting" OR "Yoga" OR "Mediterranean diet" OR Massage OR nutrition OR vitamin OR herb* OR "medicinal plant*" OR "medium chain fatty acids" OR "medium chain triglycerides" OR outdoors OR outside OR nature OR gardening OR "chinese medicine" OR mahjong OR "tai chi" OR taiji OR "tai ji" OR tai-ji OR "lifestyle changes" OR "lifestyle modification" OR "lifestyle choices")

S5 DE "Cognitive Rehabilitation" OR "Neuropsychological Rehabilitation" OR "Neurorehabilitation" OR "Occupational Therapy" OR "Physical Therapy" OR "Psychosocial Rehabilitation" OR "Animal Assisted Therapy" OR "Occupational Therapy" OR "Horticultur* Therapy" OR "Recreation* Therapy" OR "Cognitive Therapy" OR "Brain Training" OR "Memory Training" OR "Brain Stimulation" OR "Brain Self Stimulation" OR "Electrical Brain Stimulation" OR "Transcranial Magnetic Stimulation" OR "Cognitive Ability" OR "Cognitive Processes" OR "Dual Task Performance" OR Rehabilitation

S4 (DE "Treatment" OR DE "Adjunctive Treatment" OR DE "Adventure Therapy" OR DE "Aftercare" OR DE "Alternative Medicine" OR DE "Behavior Modification" OR DE "Bibliotherapy" OR DE "Cognitive Techniques" OR DE "Computer Assisted Therapy" OR DE "Creative Arts Therapy" OR DE "Crisis Intervention Services" OR DE "Cross Cultural Treatment" OR DE "Disease Management" OR DE "Health Care Services" OR DE "Hydrotherapy" OR DE "Interdisciplinary Treatment Approach" OR DE "Involuntary Treatment" OR DE "Language Therapy" OR DE "Life Sustaining Treatment" OR DE "Medical Treatment (General)" OR DE "Milieu Therapy" OR DE "Movement Therapy" OR DE "Multimodal Treatment Approach" OR DE "Multisystemic Therapy" OR DE "Online

Therapy" OR DE "Outpatient Treatment" OR DE "Pain Management" OR DE "Partial Hospitalization" OR DE "Personal Therapy" OR DE "Physical Treatment Methods" OR DE "Preventive Medicine" OR DE "Psychotherapeutic Techniques" OR DE "Psychotherapy" OR DE "Rehabilitation" OR DE "Relaxation Therapy" OR DE "Sex Therapy" OR DE "Social Casework" OR DE "Sociotherapy" OR DE "Speech Therapy" OR DE "Symptoms Based Treatment" OR DE "Treatment Guidelines") OR (DE "Treatment Effectiveness Evaluation")

S3 AB (treatment OR therapy OR program* OR strategy OR reversal OR enhancement OR intervention) OR TI (treatment OR therapy OR program* OR strategy OR reversal OR enhancement OR intervention)

S2 AB (AB dementia OR alzheimer's OR alzheimer* OR "cognitive impairment" OR "memory loss" OR "memory problem" OR "cognitive decline" OR "cognitive complaint") OR TI (AB dementia OR alzheimer's OR alzheimer* OR "cognitive impairment" OR "memory loss" OR "memory problem" OR "cognitive decline" OR "cognitive complaint")

S1 ((DE "Dementia" OR DE "AIDS Dementia Complex" OR DE "Dementia with Lewy Bodies" OR DE "Presenile Dementia" OR DE "Semantic Dementia" OR DE "Senile Dementia" OR DE "Vascular Dementia") OR (DE "Alzheimer's Disease")) OR (DE "Cognitive Impairment")

Medline Search hits = 3,859 (3,056)

S12 S7 AND S8 AND S11

S11 S9 OR S10

S10 AB ("non drug therapy" or "non-drug therapy" OR "non-drug interventions" OR "non drug interventions" OR "non-pharmacological") OR TI ("non drug therapy" or "non-drug therapy" OR "non-drug interventions" OR "non drug interventions" OR "non-pharmacological")

S9 TI (multimodal OR "multifactorial intervention" OR multidomain OR multicomponent OR mind-motor OR holistic OR wholistic OR "dual task" OR cognitive-physical OR "cognitive motor" OR "multiple modalities" OR combined) OR AB (multimodal OR "multifactorial intervention" OR multidomain OR multicomponent OR mind-motor OR holistic OR wholistic OR "dual task" OR cognitive-physical OR "cognitive motor" OR "multiple modalities" OR combined OR "mental and physical" OR "comprehensive treatment program")

S8 S3 OR S4 OR S5 OR S6

S7 S1 OR S2

S6 TI (exercise OR "Aerobic Exercise" OR "Weightlifting" OR "Yoga" OR "Mediterranean diet" OR Massage OR nutrition OR vitamin OR herb* OR "medicinal plant*" OR "medium chain fatty acids" OR "medium chain triglycerides" OR outdoors OR outside OR nature OR gardening OR "chinese medicine" OR mahjong OR "tai chi" OR taiji OR "tai ji" OR tai-ji OR "lifestyle changes" OR "lifestyle modification" OR "lifestyle choices") OR AB (exercise OR "Aerobic Exercise" OR "Weightlifting" OR "Yoga" OR "Mediterranean diet" OR Massage OR nutrition OR vitamin OR herb* OR "medicinal plant*" OR "medium chain fatty acids" OR "medium chain triglycerides" OR outdoors OR outside OR nature OR gardening OR "chinese medicine" OR mahjong OR "tai chi" OR taiji OR "tai ji" OR tai-ji OR "lifestyle changes" OR "lifestyle modification" OR "lifestyle choices")

S5 AB ("brain stimulation" OR "cognitive stimulation" OR rehabilitation) OR TI ("brain stimulation" OR "cognitive stimulation" OR rehabilitation) OR SU ("brain stimulation" OR "cognitive stimulation" OR rehabilitation)

S4 SU ("Deep Brain Stimulation") OR ("Transcranial Magnetic Stimulation") OR ("Electric Stimulation Therapy") OR ("Physical Stimulation") OR ("Self Stimulation") OR ("Transcranial Direct Current Stimulation") OR ("Transcutaneous Electric Nerve Stimulation") OR ("Subliminal Stimulation") OR ("Electric Stimulation") OR ("Acoustic Stimulation") OR ("recreation* therapy") OR ("cognitive therapy") OR ("cognitive function") OR ("cognitive rehabilitation") OR ("neuropsychological rehabilitation") OR ("dual task") OR ("brain training")

S3 AB ((treatment OR therapy OR program* OR strategy OR reversal OR enhancement OR intervention)) OR TI ((treatment OR therapy OR program* OR strategy OR reversal OR enhancement OR intervention))

S2 AB ((dementia OR alzheimer's OR alzheimer* OR "cognitive impairment" OR "memory loss" OR "memory problem" OR "cognitive decline" OR "cognitive complaint")) OR TI ((dementia OR alzheimer's OR

alzheimer* OR "cognitive impairment" OR "memory loss" OR "memory problem" OR "cognitive decline" OR "cognitive complaint"))

S1 (MH "Dementia+") OR (MM "Alzheimer Disease") OR (MM "Cognitive Dysfunction")

Scopus search hits = 45

(((TITLE-ABS-KEY (dementia) OR TITLE-ABS-KEY (alzheimer*) OR TITLE-ABS-KEY (cognitive AND dysfunction)) AND DOCTYPE (ar)) AND (TITLE-ABS-KEY (multimodal OR "multifactorial intervention" OR multidomain OR multicomponent OR mind-motor OR holistic OR wholistic OR "dual task" OR cognitive-physical OR "cognitive motor" OR "multiple modalities" OR combined) AND DOCTYPE (ar))) AND (TITLE-ABS-KEY (treatment OR intervention OR study OR program* OR strategy) AND DOCTYPE (ar))) AND (TITLE-ABS-KEY ("non drug therapy" OR "non-drug therapy" OR "non-drug interventions" OR "non drug interventions" OR "non-pharmacological") AND DOCTYPE (ar)) AND (LIMIT-TO (SUBJAREA , "MEDI") OR LIMIT-TO (SUBJAREA , "NEUR") OR LIMIT-TO (SUBJAREA , "PSYC")) AND (LIMIT-TO (LANGUAGE , "English")))

Cochrane search hits = 189

LILAC search hits = 112

CINAHL search hits = 964

S12 S7 AND S8 AND S11

S11 S9 OR S10

S10 AB ("non drug therapy" or "non-drug therapy" OR "non-drug interventions" OR "non drug interventions" OR "non-pharmacological") OR TI ("non drug therapy" or "non-drug therapy" OR "non-drug interventions" OR "non drug interventions" OR "non-pharmacological")

S9 TI (multimodal OR "multifactorial intervention" OR multidomain OR multicomponent OR mind-motor OR holistic OR wholistic OR "dual task" OR cognitive-physical OR "cognitive motor" OR "multiple modalities" OR combined) OR AB (multimodal OR "multifactorial intervention" OR multidomain OR multicomponent OR mind-motor OR holistic OR wholistic OR "dual task" OR cognitive-physical OR "cognitive motor" OR "multiple modalities" OR combined OR "mental and physical" OR "comprehensive treatment program")

S8 S3 OR S4 OR S5 OR S6

S7 S1 OR S2

S6 TI (exercise OR "Aerobic Exercise" OR "Weightlifting" OR "Yoga" OR "Mediterranean diet" OR Massage OR nutrition OR vitamin OR herb* OR "medicinal plant*" OR "medium chain fatty acids" OR "medium chain triglycerides" OR outdoors OR outside OR nature OR gardening OR "chinese medicine" OR mahjong OR "tai chi" OR taiji OR "tai ji" OR tai-ji OR "lifestyle changes" OR "lifestyle modification" OR "lifestyle choices") OR AB (exercise OR "Aerobic Exercise" OR "Weightlifting" OR "Yoga" OR "Mediterranean diet" OR Massage OR nutrition OR vitamin OR herb* OR "medicinal plant*" OR "medium chain fatty acids" OR "medium chain triglycerides" OR outdoors OR outside OR nature OR gardening OR "chinese medicine" OR mahjong OR "tai chi" OR taiji OR "tai ji" OR tai-ji OR "lifestyle changes" OR "lifestyle modification" OR "lifestyle choices")

S5 DE "Cognitive Rehabilitation" OR "Neuropsychological Rehabilitation" OR "Neurorehabilitation" OR "Occupational Therapy" OR "Physical Therapy" OR "Psychosocial Rehabilitation" OR "Animal Assisted Therapy" OR "Occupational Therapy" OR "Horticultur* Therapy" OR "Recreation* Therapy" OR "Cognitive Therapy" OR "Brain Training" OR "Memory Training" OR "Brain Stimulation" OR "Brain Self Stimulation" OR "Electrical Brain Stimulation" OR "Transcranial Magnetic Stimulation" OR "Cognitive Ability" OR "Cognitive Processes" OR "Dual Task Performance" OR Rehabilitation

S4 (DE "Treatment" OR DE "Adjunctive Treatment" OR DE "Adventure Therapy" OR DE "Aftercare" OR DE "Alternative Medicine" OR DE "Behavior Modification" OR DE "Bibliotherapy" OR DE "Cognitive Techniques"

OR DE "Computer Assisted Therapy" OR DE "Creative Arts Therapy" OR DE "Crisis Intervention Services" OR DE "Cross Cultural Treatment" OR DE "Disease Management" OR DE "Health Care Services" OR DE "Hydrotherapy" OR DE "Interdisciplinary Treatment Approach" OR DE "Involuntary Treatment" OR DE "Language Therapy" OR DE "Life Sustaining Treatment" OR DE "Medical Treatment (General)" OR DE "Milieu Therapy" OR DE "Movement Therapy" OR DE "Multimodal Treatment Approach" OR DE "Multisystemic Therapy" OR DE "Online Therapy" OR DE "Outpatient Treatment" OR DE "Pain Management" OR DE "Partial Hospitalization" OR DE "Personal Therapy" OR DE "Physical Treatment Methods" OR DE "Preventive Medicine" OR DE "Psychotherapeutic Techniques" OR DE "Psychotherapy" OR DE "Rehabilitation" OR DE "Relaxation Therapy" OR DE "Sex Therapy" OR DE "Social Casework" OR DE "Sociotherapy" OR DE "Speech Therapy" OR DE "Symptoms Based Treatment" OR DE "Treatment Guidelines") OR (DE "Treatment Effectiveness Evaluation")

S3 AB (treatment OR therapy OR program* OR strategy OR reversal OR enhancement OR intervention)
OR TI (treatment OR therapy OR program* OR strategy OR reversal OR enhancement OR intervention)

S2 AB (AB dementia OR alzheimer's OR alzheimer* OR "cognitive impairment" OR "memory loss" OR "memory problem" OR "cognitive decline" OR "cognitive complaint") OR TI (AB dementia OR alzheimer's OR alzheimer* OR "cognitive impairment" OR "memory loss" OR "memory problem" OR "cognitive decline" OR "cognitive complaint")

S1 ((DE "Dementia" OR DE "AIDS Dementia Complex" OR DE "Dementia with Lewy Bodies" OR DE "Presenile Dementia" OR DE "Semantic Dementia" OR DE "Senile Dementia" OR DE "Vascular Dementia") OR (DE "Alzheimer's Disease")) OR (DE "Cognitive Impairment")