

## Supplementary File 2: Inclusion and exclusion criteria

Criteria		
Category	Inclusion	Exclusion
Population	- Adults (45 years or older) without a clinical diagnosis of cognitive impairment; this includes people with subjective cognitive impairment	- People younger than 45 years - People with a clinical diagnosis of impaired cognition (e.g., MMSE < 24) - Populations comprised exclusively of patients with primary diseases with an increased risk for dementia such as Parkinson disease, HIV infection, multiple sclerosis, stroke, post traumatic brain injuries, infectious diseases, psychiatric conditions (e.g. alcohol abuse, drug abuse, major depressive disorder)
Subgroups	- Age - Sex/gender - Race/ethnicity - Level of education - Duration of intervention	
Geography	No limit	No limit
Date of search	Searches will go back until 1990	
Settings	Community-dwelling adults	Institutionalized people, e.g., people in nursing homes
Interventions	<b>For systematic review</b> - all cognitive activities that are provided by formal and non-formal educational institutions - classes/courses/trainings that are based on individual interests and that are attended voluntarily  <b>For overview of systematic reviews</b> Leisure activities that are cognitively stimulating and mimic the content of continuing education but in an informal setting.	Formal (vocational) education and training; physical activities, topics and courses that are related to any special job position and/or occupation
Control Interventions	No continuing education	Any educational activities, physical activities
Outcomes	<b>Health Outcomes</b> - Incidence of dementia - Incidence of MCI - Psychological wellbeing - Functional capacity - Quality of life - Other relevant health outcomes  <b>Intermediate Outcomes</b> - Cognitive functioning - Cognitive (test) performance - Social inclusion	
Timing	Minimum duration of the intervention: 3 months Minimum follow up time: 1 year	
Publication language	No language restrictions	
Study design	<b>For systematic reviews</b> - RCTs - Nonrandomized controlled trials - Prospective controlled cohort studies - Retrospective controlled cohort studies - Case-control studies - Nonrandomized studies must have a minimum sample size of 300 or more participants  <b>For overview of systematic reviews</b> -systematic reviews and meta-analyses	- Case series - Case reports - Cross over trials - Nonsystematic reviews - Studies without a control group - Nonrandomized studies with fewer than 300 participants