Summary
As economic pressure was put on Dutch pension systems due to the ageing of the population, efforts have been made to increase workforce participation among older workers. Several threats have been identified that may diminish the feasibility and success of increasing older workers’ workforce participation. The following three factors are considered to be important threats: work demands, poor memory performance, and the effect of retirement age on health. Within these three areas, studies were performed and described in this thesis. The aim of these studies was to improve the comprehension of the relationship of employment and retirement with health to help determine whether the feasibility and success of the retirement policies aimed at increasing workforce participation can be improved. This thesis had three objectives: 1) To develop and validate a general population job-exposure matrix (GPJEM) including physical work demands, psychosocial work demands, and psychosocial work resources, 2) To examine whether memory complaints reported by 55-64-year-olds are associated with objectively measured memory performance (objective 2a), employment, and employment characteristics (objective 2b), and 3) To examine whether on- and off-time retirement are associated with subjective general and emotional health. Three data sets were applied in this thesis: the Longitudinal Aging Study Amsterdam (the LASA study), the Netherlands Working Conditions Survey (the NWCS study), and the German Ageing Survey (Deutscher Alterssurvey; the DEAS study).

In chapter 2 the development and validation of a GPJEM is described (objective 1). In this thesis a GPJEM was developed for older workers (55-64 years) and included the following work exposures: physical demands, psychosocial demands, and psychosocial resources. The Netherlands Standard Classification of Occupations 1992 (NSCO92) was used to classify occupations. As a primary validation of the GPJEM, associations of physical demands and iso-strain (i.e. high psychosocial demands and low psychosocial resources) with health were examined. The results suggest that our GPJEM accurately classifies jobs according to physical demands and, although less clearly, to iso-strain.

In chapter 3 a study was described in which it was examined whether memory complaints are related to objectively measured memory performance and decline in 55-64-year-olds (objective 2a). Adjusted for gender, education, and age, 55-64-year-olds with prevalent memory complaints more often had impaired delayed recall and were at risk of subsequent clinically relevant decline in learning ability at follow-up (i.e. during a period of three years). No association was found in chapter 3 between incident memory complaints and memory decline in 55-64-year-olds.
Results described in chapter 4 show that, independent of memory functioning or other causal or underlying factors, individuals with cognitively demanding work were more likely to experience prevalent memory complaints. Employment status (i.e. of at least one hour weekly) or other employment characteristics (i.e. working hours, job prestige, job level, task requirements, iso-strain) were not associated with memory complaints.

In chapters 5 and 6, results were described of studies investigating whether on- and off-time retirement were associated with subjective general and emotional health. After adjustment for relevant individual and contextual characteristics (e.g. baseline self-perceived health, sense of mastery), retirees were equally likely to have excellent, good, or less than good subjective general health compared to age peers who continued employment (chapter 5). In addition, compared to employed age peers, individuals who retired on-time (59-60 years) were more likely to have excellent or good subjective general health, with less than good subjective general health as the reference category, but only if they did not receive a disability pension. Early (55–58 years) and late (61–64 years) retirees’ subjective general health was unaffected by retirement if they did not receive a disability pension. Early and late retirees who received a disability pension were less likely to have excellent subjective general health after retirement. Retirement planning, as a proxy for involuntary retirement, did not affect the examined relationships.

Results described in chapter 6 reveal that, after adjustment for relevant individual and contextual characteristics, retirees and workers were equally likely to have poorer subjective emotional health at any age. Therefore, on- and off-time retirement did not affect subjective emotional health. After health-related retirement, poorer subjective emotional health was observed, most likely because of health selection into retirement. Only late retirees who retired because of job loss had poorer subjective emotional health compared to age peers who continued employment.

Conclusions
The studies described in this thesis show that possibilities exist for improving the feasibility and success of the retirement policies aimed at increasing older workers’ workforce participation in the Netherlands. Physical and psychosocial work exposures are argued to be important threats for employment in older individuals in the Netherlands. The GPJEM developed and validated in this thesis can easily be applied in existing data sets to determine physical and psychosocial work exposures in existing data sets and thereby facilitates research on these work exposures among older workers. Poor or declining memory functioning has also been identified as a
potential threat for older workers’ workforce participation. As shown in this thesis, the single question about memory complaints may be used as a first step towards identifying 55-64-year-olds who have impaired memory functioning and are at risk of clinically relevant memory decline. The most important finding reported in chapter 4 was that high cognitive work demands were observed to also underlie prevalent memory complaints. Such underlying factors should be taken into account when assessing the significance of memory complaints in older workers to, subsequently, decide on the most suitable intervention. Finally, results described in this thesis also suggest that the success of the retirement policies aimed at increasing workforce participation of older workers in the Netherlands may be enhanced by (further) increasing the age at which retirement is perceived to be on-time. However, for individuals who retired for health reasons other interventions may be necessary.