Which types of mental work demands may be associated with reduced risk of dementia?

Abstract: Previous studies have demonstrated that an overall high level of mental work demands decreased dementia risk. In our study, we investigated whether this effect is driven by specific mental work demands and whether it is exposure dependent. Patients aged 75+ years were recruited from general
practitioners and participated in up to seven assessment waves (every 1.5 years) of the longitudinal AgeCoDe study. Analyses of the impact of specific mental work demands on dementia risk were carried out via multivariate regression modeling (n = 2315). We observed a significantly lower dementia risk in individuals with a higher level of "information processing" (HR, 0.888), "pattern detection" (HR, 0.878), "mathematics" (HR, 0.878), and "creativity" (HR, 0.878). Yet, exposure-dependent effects were only significant for "information processing" and "pattern detection." Our longitudinal observations suggest that dementia risk may be reduced by some but not all types of mental work demands.