Choice reaction time and grip strength as predictors of cardiovascular mortality in middle-aged and elderly Japanese: From the Radiation Effects Research Foundation Adult Health Study

Cognitive function and physical function in humans decline with advancing age, but few studies have investigated simultaneously their association with cause-of-death diseases.

In this study, "reaction time" (measured by the time required to turn off illuminated lights in a fixed order) and "grip strength" were utilized as indicators of cognitive function and of physical function, respectively. Those results were used to investigate relationship with death from heart disease or stroke.

After about 35 years of follow-up, the study concluded that the shorter the reaction time and, in the same way, the stronger the grip strength, the greater the decrease was in mortality from heart disease or stroke.

RERF's objective with this brief outline is to succinctly explain our research for the lay public. Much of the technical content of the original paper has been omitted. For further details about the study, please refer to the full paper published by the journal.