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# Motor Reserve and Current Physical Activity on Cognitive Performance, in elderly: Never too late to start exercise

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Cognitive performance tends to decline with aging; however, numerous studies have highlighted the protective effects of physical exercise which contributes to better oxygenation and vascular supply to the brain (Goenarjo et al., 2020; Chung et al., 2008). The present study investigated the impact of both Motor Reserve (MR), a cumulative measure of lifetime physical activity and Current Physical Activity (CPA), measured over the past year, on cognitive performance.
On a sample of 727 elderly individuals (from 64 to 104 y.o.) and with different levels of MR, Pearson's correlations showed that those who are currently physically active (high CPA) demonstrate better cognitive performance than those who are less active (low CPA), even if the latter accumulated more MR. In other words, CPA has a strong and consistent positive association with cognitive performance, regardless of MR accumulated over life.
Regression analyses showed that considering also Age, MR predicts cognition ($\beta = 0.31$, $p < 0.001$), but after including CPA ($\beta = 0.85$, $p < 0.001$) then MR is not a significant predictor ($\beta = -0.05$, $p = 0.58$).
In conclusion, CPA appears to be more important for cognition than MR, suggesting that, regardless of past motor physical activity, current physical activity plays a more crucial role for cognition. In other words, what matters most is the physical activity you are doing now, rather than what you did in the past.

## If you're submitting a symposium talk, what's the symposium title?

Ageing as a Process of Adaptation and Evolution

## If you're submitting a symposium, or a talk that is part of a symposium, is this a junior symposium?

No

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