

Markers of Aging

-- General cognitive functions decline with age while emotion and social functions improve with age.

	Disposition	Emotion	Feeling	Thinking	Self Regulation
Aging	BDNF Met66 ¹ COMT Met ¹ MAOA ¹ DRD4 ¹ 5HTT-LPR ¹	↑ Face VPP ¹ ↑ N170 Amplitude ³ ↓ N170 Latency ³		↓ Working Memory ¹ ↓ Attention ¹ ↓ Executive Function ¹ ↓ Verbal Memory ¹ ↓ Verbal Processing ¹ ↓ Information Processing Efficacy ¹ ↓ ERP P300 ¹ ↓ ERP P450 ¹ ↑ ERP N200 ¹ ↓ Cortical Grey Matter ^{1, 2}	↑ Social Skills ¹ ↑ Positivity Bias ¹ ↑ Emotional Resilience ¹

ERP P300 for Attention tasks

ERP P450 for the Working Memory task

ERP N200 for the Go/No-Go task (No-Go)

VPP: Vertex Positive Potential

Aging References

1. Williams, L. M., Gatt, J. M., Hatch, A., Palmer, D. M., Nagy, M., Rennie, C., Cooper, N. J., Morris, C., Grieve, S., Dobson-Stone, C., Schofield, P., Clark, C. R., Gordon, E., Arns, M., & Paul, R. H. (2008). The integrate model of emotion, thinking and self regulation: an application to the "paradox of aging". *Journal of integrative neuroscience*, 7 (3), 367-404.
2. Grieve, S. M., Clark, C. R., Williams, L. M. Peduto, A. J. & Gordon, E. (2005). Preservation of Limbic and Paralimbic Structures in Aging. *Human Brain Mapping*, 25, 391– 401.
3. Palmer, D. M., Williams, L. M., Liddell B., J., & Gordon, E. (In submission). About face: age-related changes in the neural time course of face processing.