Self defining Memories (SDM) are highly significant autobiographical memories that contribute to the construct of identity (Conway et al., 2004). SDM are vivid, emotional and carry the values of the individuals (Conway et al., 2004; Singer & Blagov, 2000). However, to the best of our knowledge, no study has evaluated psychophysiological changes that may be related to emotional processes in SDM.

The aim of this study is to examine the emotional process involved during the evocation of SDM using neurovegetative indicators. We recorded both a marker of emotional activation of the sympathetic system (electrodermal activity) and an indicator of the parasympathetic system (High frequency of the Heart-rate variability, HF-HRV) to characterize the emotional processes.

HF-HRV decrease from control task period to recall period.

Mean deviations of standard electrodermal responses (MeanPhasicDriver) and the responses frequency (SCR freq) increase from relaxation period to recall period.

Relatively to the control task, SDM retrieval resulted in an activation of sympathetic and parasympathetic nervous system. These physiological activations highlight the role of emotional processes and regulation mechanisms during SDM retrieval.

References

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