

Psychophysiological reactions, stress and recuperation among telecommuting academics

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Telecommuting is a working arrangement that is highly adopted among academic staff. This may be a cause or a consequence of expanding demands on productivity, efficiency and availability of academic staff [1]. A previous study on white-collar workers at a government authority showed higher cardiovascular arousal during work at the office, but less recovery after working from home [2]. To our knowledge, these findings have not been confirmed or refuted in other populations. As part of an ongoing study, we aimed to determine whether there is a difference in perceived stress and psychophysiological reactions during work at the central workplace (CW) compared to work performed away from the central workplace (OCW) among academic staff. In addition, recuperation after work performed at the two locations were compared. For each subject, saliva cortisol was collected regularly throughout each of two working days in the same work week (*i.e.*, one full day CW and one full day OCW). Before and after each working day, the subjects rated their stress and fatigue on 100 mm Visual Analogue Scales (VAS) where higher values imply more stress and fatigue, and the difference in ratings within a day (*i.e.*, after-before) was calculated. In the morning after each of the working days, the subjects rated how recuperated they felt on VAS where higher values imply more recuperation. Cortisol values were analyzed using repeated measures analysis of variance with Day (2 days) and Time of day (6 time points) as within-subjects effects. Self-ratings were compared using paired-samples T test. In all tests, the level of significance was $p=0.05$. Preliminary results show no significant differences between days in cortisol curves ($F=0.62$; $p=0.685$), stress ($\Delta\text{stress}=2$ for CW and -1 for OCW; $p=0,604$), fatigue ($\Delta\text{fatigue}=7$ for CW and 6 for OCW; $p=0,837$) and recuperation (51 for CW and 61 for OCW; $p=0,094$).

References

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