

Preliminary Cross-Sectional Study About Remote Work and Office Workers' Health in Catalonia. Sedentary Behaviour, Musculoskeletal Symptoms, Physical Activity, Perceived Fitness, and Quality Of Life

Arnau Gustems Morral, Iris Parés-Salomón, Judit Bort-Roig, Anna Señé Mir

University of Vic – Central University of Catalonia (UVic-UCC), Barcelona, Spain

Background: The shift towards remote work, accelerated by the COVID-19 pandemic, has significantly transformed the working environment for many office employees. While teleworking offers greater flexibility, it may also lead to increased sedentary behaviour and have implications for musculoskeletal health, physical activity patterns, and perceived wellbeing. This preliminary study aims to explore the relationships between remote work and various health indicators among office workers.

Methods: A cross-sectional online survey was conducted with 275 office workers who engage in remote work at least one day per week, as part of a larger study aiming to recruit 400 participants. The survey included sociodemographic variables, the Standardised Nordic Questionnaire to assess musculoskeletal symptoms, the Global Physical Activity Questionnaire to evaluate physical activity levels and sedentary time, the International Fitness Scale to identify perceived physical fitness, and SF-12v2 to assess the perceived health-related quality of life. Descriptive and inferential analyses were conducted depending on whether the assumptions of the parametric test were met. *T*-test, Mann–Whitney U, Kruskal–Wallis, and Chi-Square tests were performed to explore the relationship between the presence of musculoskeletal complaints and total minutes/day of physical activity, days/week of telework, and gender.

Results: A total of 63.6% of participants reported neck and shoulder discomfort (mean 4.46 ± 2.17), and 49.2% reported upper and lower back pain (mean 4.62 ± 2.02). Women reported more back pain than men ($X^2(2, N = 250) = 10,013$; $p = 0.007$). Daily minutes of physical activity were significantly higher among those with better perceived physical fitness [$H(4) = 38,615$; $p < 0.001$]. Participants who teleworked more days per week reported more neck and shoulder pain ($U = 5,670$; $p = 0.003$), and those with back pain had a more negative perception of their mental health ($U = 6,246$; $p = 0.006$).

Conclusion: This preliminary analysis suggests that remote work may be associated with increased sedentary time and a high prevalence of musculoskeletal discomfort. Lower physical activity levels and poorer self-perceived fitness appear to be contributing factors. These findings highlight the importance of promoting physical activity in remote work settings. Public health policies and workplace health promotion strategies should address these challenges to support healthier and more sustainable teleworking environments.

