

SUPPLEMENTARY METHODS MATERIAL

Office Workstation Type and Work Type

Two independent raters coded each participant's work based on their free-form work description in an intake survey and their division's description on their website. After satisfying sufficiently large Cohen's Kappa interrater agreement levels for each variable, the raters conferred and came to complete agreement. Work characteristics were coded using binary descriptors of: (1) 'computer-dominant' ($\kappa = .81$); (2) 'managerial' ($\kappa = .86$); and (3) 'technical' ($\kappa = .77$).

Cardiac Activity

The EcgMove 3 (movisens GmbH, Karlsruhe, Germany) sensor weighs 26 grams and has the following dimensions: width \times height \times depth: 62.3mm \times 38.6mm \times 11.5mm. The sensor is fixed with two standard electrocardiography (ECG) patches to the skin below the sternum or with a chest belt, depending on participant preference.

Data acquired at the office and outside the office were separately analyzed. Each participant's time at the office (start-time and end-time) was recorded by a research coordinator. Time outside the office was considered to begin one hour after leaving the office, and end one hour before the onset of sleep. We objectively identified the onset of sleep using accelerometer data.

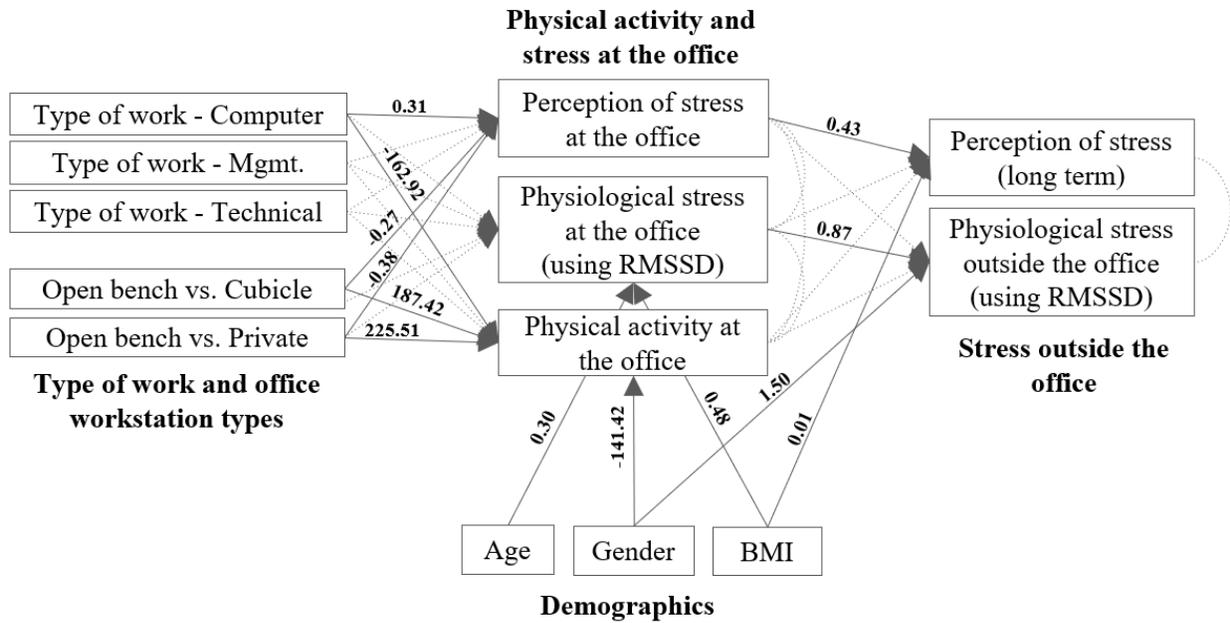
Physical Activity

To calculate the physical activity level for each participant, 6-second segments were first extracted from the accelerometer data. The average for each 5-minute period was then calculated to match the 5-minute cardiac activity periods. The cumulative sum of the physical activity levels in mG for each participant was divided by the duration of time at the office to calculate the

physical activity level of each participant per day. The total physical activity levels measured for each day were then averaged across all days of participation (ActLevAvg) for statistical analysis.

Statistical Methods

Long-term perceived stress was indirectly measured as a latent construct characterized by the four items in the PSS-4; all the other constructs in the structural model were directly measured. Maximum likelihood estimation (MLE) was used, a method that determines the significant path coefficients in the model, as well as parametric bootstrapping, a method that derives robust standard errors. Moreover, by utilizing the full information maximum likelihood (FIML) method, missing values are not replaced or imputed, but handled within the analysis model. The lavaan package in R was used for model fit and validation. Additionally, we report p values and η^2 for the between-group effect sizes in the one-way ANOVA tests.



Supplementary figure A. Structural equation model results with RMSSD as an output. Solid lines represent significant paths and include unstandardized coefficient estimates. Minus (-) signs indicate negative relationships between variables.

Supplementary table A. Structural equation model results for RMSSD as an outcome

Input (Variable)	Outcome (Variable)	Coefficient estimate (SE)	95% CI
Computer-dominant work	Perceived stress at the office (EMA 'tense' ratings at the office)	0.313 (0.13) ^a	0.06 to 0.57
Open bench seating vs. Cubicle	Perceived stress at the office (EMA 'tense' ratings at the office)	-0.27 (0.10) ^a	-0.45 to -0.08
Open bench seating vs. Private office	Perceived stress at the office (EMA 'tense' ratings at the office)	-0.38 (0.14) ^a	-0.65 to -0.11
Computer-dominant work	Physical activity at the office (ActLevAvg at the office)	-162.92 (41.41) ^a	-244.59 to -81.25
Open bench seating vs. Cubicle	Physical activity at the office (ActLevAvg at the office)	187.42 (70.76) ^a	47.91 to 326.95
Open bench seating vs. Private office	Physical activity at the office (ActLevAvg at the office)	225.51 (34.96) ^a	156.18 to 294.07
Perceived stress at the office (EMA 'tense' ratings at the office)	Long-term perceived stress (PSS-4)	0.43 (0.10) ^a	0.25 to 0.62
Physiological stress at the office (Median RMSSD at the office)	Physiological stress outside the office (Median RMSSD outside the office)	0.87 (0.05) ^a	0.76 to 0.97
Physical activity at the office (ActLevAvg at the office in G)	Physiological stress outside the office (Median RMSSD outside the office in ms)	Insignificant 0.2067 (1.32) (p-value = 0.876)	-2.4137 to 2.8272
Age	Physiological stress at the office (Median RMSSD at the office)	0.30 (0.04) ^a	0.21 to 0.38
BMI	Physiological stress at the office (Median RMSSD at the office)	0.47 (0.08) ^a	0.32 to 0.63
BMI	Long-term perceived stress (PSS-4)	0.01 (0.00) ^b	0.00 to 0.02
Gender	Physical activity at the office (ActLevAvg at the office)	-141.42 (39.14) ^a	-218.61 to -64.24
Gender	Physiological stress outside the office (Median RMSSD outside the office)	1.50 (0.22) ^a	1.05 to 1.95

Global estimation with maximum likelihood approach was used for simultaneous estimation of the path coefficients. Bootstrapping with 100 repetitions used to derive CI and standard error for estimates.

^a P < .01.

^b P < .05.