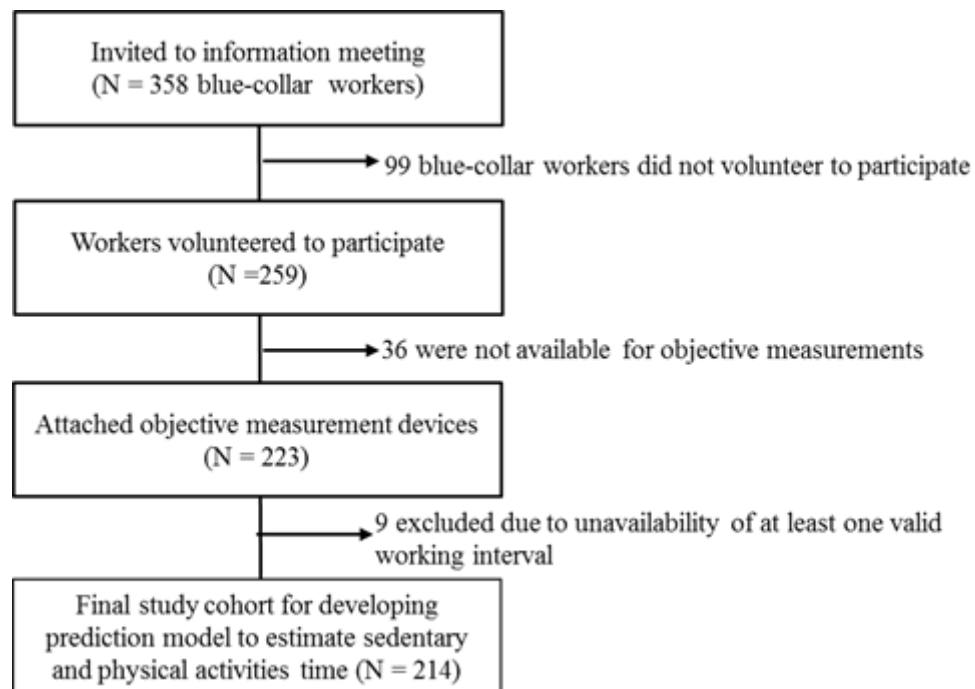# Original article

Prediction of objectively measured physical activity and sedentariness in blue-collar work using survey questionnaires [1]

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[1] Supplementary appendices

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Appendix A. Recruitment flow of the study population. N=number of workers.

Appendix B. Self-reported predictors included in the full statistical models estimating objectively measured time spent sedentary and in physical activity at work among blue-collar workers, and procedures for retrieving these predictors.

Predictor	Measurement procedure
1. Age	Danish personal identification number
2. Gender	Answer to the item *Are you male or female?*
3. Body mass index (BMI)	Based on answers to two items '*how tall are you (cm)?*' and '*how much do you weigh (kg)?* '. The body weight (kg) was then divided by height (m) squared to give the BMI.
4. Job groups	Classified according to the International Standard Classification of Occupations (ISCO-08) (59).
5. OST	Answer to a single item on reporting the proportion of working time spent sitting on a scale of 1 (almost all the time) to 6 (almost never)
6. OPA	Workers reported their occupational physical activity using a modified single item from Saltin and Grimby's OPA questionnaire (50), i.e. '*How would you describe your physical activity at your main job?*' with four response categories, (1) Mostly sedentary work that does not require strenuous physical activity, (2) Mostly work while standing or walking but not requiring strenuous physical activity, (3) Work while standing or walking with some lifting and carrying, (4) Heavy or fast work that is physically strenuous.

OST: occupational sedentary time; OPA: occupational physical activity.

Appendix C. Models predicting objectively measured physical activity time at work on the basis of answers to questions normally available in large epidemiological studies and surveys.

Predictor	B	95% CI
Single-predictor model based on only 'OST' (variable #5 in Appendix B)		
Intercept	20.39	12.55-28.22
Occupational sedentary time (1-6)	10.14	8.31-11.98
		R^2 adjusted = 38%, MSE= 215.7
Single-predictor model based on only 'OPA' (variable #6 in Appendix B)		
Intercept	37.50	29.85-45.15
OPA Category 2 (yes=1; no=0)	33.78	23.57-43.99
OPA Category 3 (yes=1; no=0)	28.65	20.34-36.97
OPA Category 4 (yes=1; no=0)	22.26	13.52-31.00
		R^2 adjusted = 21% , MSE= 265.4
Full model		
Intercept	-11.91	-27.89-4.06
Age (years)	0.23	0.04-0.41
Gender (Female=1; male=0)	4.14	-1.28-9.56
OPA Category 2 (yes=1; no=0)	15.02	5.95-24.08
OPA Category 3 (yes=1; no=0)	15.71	7.15-24.27
OPA Category 4 (yes=1; no=0)	11.46	2.21-20.71
BMI (kg/m^2)	0.37	-0.02-0.76
OST (1-6)	6.57	4.76-8.38
Job group Health services (yes=1; no=0)	7.66	-3.48-18.80
Job group Assembling (yes=1; no=0)	10.38	0.06-20.70
Job group Cleaning (yes=1; no=0)	6.29	-4.03-16.60
Job group Construction (yes=1; no=0)	5.43	-3.32-14.17
Job group Manufacturing (yes=1; no=0)	25.42	16.67-34.16

Job group Garbage collection (yes=1; no=0)	12.17	2.64-21.69
	R^2 adjusted = 63%, MSE= 117.0	

OPA: Occupational Physical Activity. Category 2; 'Mostly work while standing or walking but not requiring strenuous physical activity'; Category 3: 'Work while standing or walking with some lifting and carrying'; Category 4: 'Heavy or fast moving work that is physically strenuous'; OST: occupational sedentary time.

B, 95%CI: regression coefficient with 95% confidence interval

R^2 adjusted: coefficient of determination adjusted for the terms in the model

MSE: mean squared error