

SUPPLEMENTARY TABLES

Supplementary Table 1. PFI importance scores for features used in PsychoAge.

Domains	Features	PFI value	
Health	Health limits on vigorous activity	1.155	
	Prescription medications for blood pressure	1.054	
	Headaches frequency (30 days)	0.727	
	Health compared to others your age	0.491	
	Health locus of control - others	0.170	
	Body mass index	0.135	
	Mental/emotional health self-evaluated	0.100	
	Thought/effort put in health	0.066	
	Any chronic conditions (12 months)	0.061	
	Shortness of breath during a little physical activity such as walking up a slight hill	0.033	
	Health 10 years in future	0.027	
	Health locus of control - Self	0.017	
	Current opinion about health	< 0.01	
	Closer relationships	Rate sexual aspects of life 10 years in future	1.542
		Marital status	0.991
Thought/effort sexual aspect of life		0.192	
Current opinion about sexual aspects of life		0.065	
Images of life changes	Age men enter middle age	0.639	
	Age women enter middle age	0.177	
	Age men no longer identify as middle age	0.177	
	Age women no longer identify as middle age	0.040	
Occupational features	Current opinion about work situation 10 years future	0.498	
	Current opinion about work situation	0.297	
	Thought/effort in work	0.082	
Community involvement	Contribution to others welfare 10 years future	0.400	
	Community as source of comfort	0.275	
	Unique contributions to society	0.092	
	Current opinion about contribution to others' welfare	0.035	
	World is becoming better place	0.033	
	Thought/effort in contribution to others welfare	0.033	
Personality traits	Satisfied with self at present	< 0.01	
	Neuroticism as a personality trait	0.154	
	Extraversion as a personality trait	0.070	
	Openness as a personality trait	0.030	
	Agreeableness as a personality trait	0.026	
	Agency as a personality trait	0.020	
	Conscientiousness as a personality trait	< 0.01	
Psychological Beliefs	Forceful as a psychological trait	0.108	
	Lower aspirations (secondary control)	0.089	
	Live for today	0.003	
	Positive reappraisal (secondary control)	0.028	
	Persist in goal striving (primary control)	0.024	
	Optimistic as a psychological trait	0.006	
	Outgoing as a psychological trait	< 0.01	

Demographic features	Highest level of education completed	0.129
	Sex	0.085
Well-being	Satisfied with life at present	0.091
	Current opinion about life overall currently	0.084
	Control over life in general at present	0.026
	Thought/effort in life overall	< 0.01

Supplementary Table 2. The performance of models trained on the MIDUS 1 dataset (all ages) and its age group subsamples (25-39, 40-64, 65-75).

Dataset	Chronological Age, years	R ²	MAE, years	Baseline MAE, years	ϵ -accuracy	N, people	
MIDUS 1	25-39	0.07	3.35	3.56	1.0	2040	
	Psychological age	40-64	0.26	4.91	6.00	0.9	3339
		65-75	-0.09	2.45	2.39	1.0	682
		all ages	0.56	6.70	10.79	0.78	6071
Subjective age	25-39	0.01	5.23	5.04	0.88	2040	
	40-64	0.15	6.89	7.40	0.76	3339	
	65-75	0.05	7.63	8.07	0.72	682	
	all ages	0.4	7.32	9.78	0.74	6071	
MIDUS 2	25-39	-2.93	3.00	1.51	1.0	346	
	Psychological age	40-64	0.25	4.93	5.94	0.91	2492
		65-75	-0.07	2.52	2.70	1.0	738
		all ages	0.46	7.18	10.27	0.73	3870
Subjective age	25-39	0.05	4.90	4.87	0.9	346	
	40-64	0.15	7.57	8.30	0.72	2492	
	65-75	0.04	7.50	8.05	0.73	738	
	all ages	0.32	8.53	10.72	0.66	3870	
MIDUS Refresher	25-40	-0.02	2.97	2.86	1.0	591	
	Psychological age	40-65	0.21	5.56	6.40	0.88	1300
		65-75	-0.01	2.33	2.61	1.0	624
		all age	0.56	7.73	12.36	0.7	2521
Subjective age	25-40	0.07	5.67	5.62	0.85	591	
	40-65	0.15	7.84	8.69	0.70	1300	
	65-75	0.04	8.27	8.51	0.68	624	
	all age	0.34	8.56	11.27	0.65	2521	

DNNs were validated on two datasets: MIDUS 2 and MIDUS Refresher with 50 input features.