

Figure S1. Flow chart for the study population.

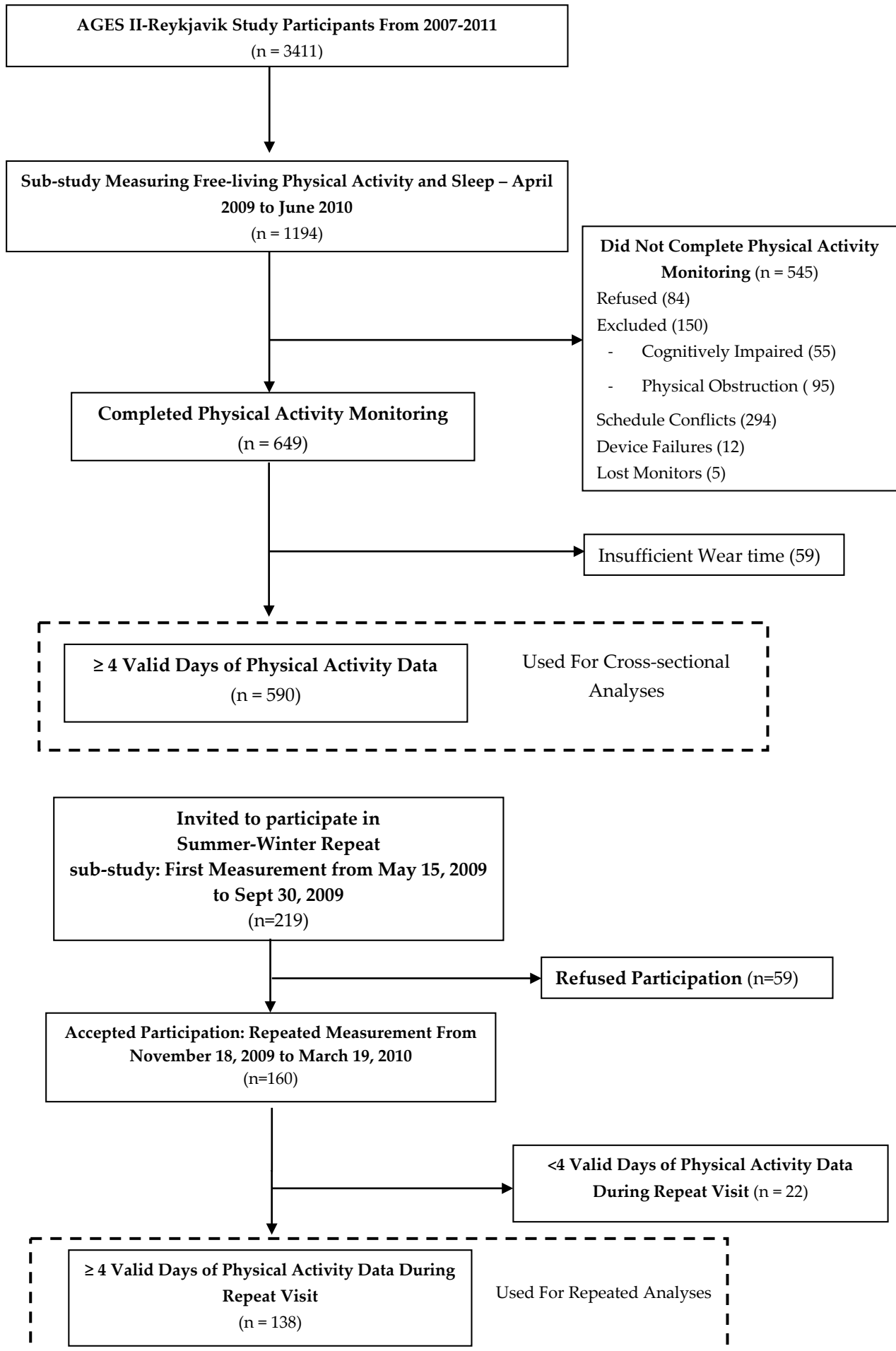


Table S1. Results of backward-elimination, linear regression of cross-sectional PA and SB parameters for the AGESII cohort. Covariates included age, sex, BMI, self-reported health status, day length, and temperature. Data are presented as standardized Beta. A negative standardized Beta (β) value indicates an inverse relationship.

Variables	Temperature/Day length		Age		Female		BMI		Health status	
	β	95%CI	β	95%CI	β	95%CI	β	95%CI	β	95%CI
WT-SB ^a	Temperature	-0.10	-0.17; -0.02							
	Day length			0.31 0.23; 0.38	-0.15 -0.23; -0.08	0.11 0.03; 0.19	0.10 0.01; 0.17			
TPA ^b	Temperature	0.10	0.03; 0.17	-0.37 -0.45; -0.30	-0.04 -0.11; 0.04					
	Day length					-0.14 -0.22; -0.06	-0.11 -0.18; -0.03			
LIPA ^b	Temperature									
	Day length	0.06	-0.02; 0.13	-0.29 -0.36; -0.21	0.19 0.11; 0.26	-0.09 -0.17; -0.01	-0.09 -0.16; -0.002			
LSPA ^b	Temperature	0.11	0.038; 0.19	-0.36 -0.43; -0.28	-0.08 -0.16; -0.006					
	Day length					-0.11 -0.19; -0.03	-0.12 -0.19; -0.04			
MVPA ^b	Temperature	0.05	-0.02; 0.13	-0.29 -0.37; -0.21	-0.21 -0.29; -0.14					
	Day length					-0.18 -0.25; -0.10	-0.10 -0.17; -0.02			

WT= Wear time; SD= standard deviation, day to day variation in each PA/SB variable; PA= Physical activity; SB= Sedentary behavior; TPA= Total PA; LIPA= Low-intensity PA (100-759 counts \times min⁻¹); LSPA= Lifestyle PA (≥ 760 counts \times min⁻¹); MVPA= Moderate-to-vigorous PA (≥ 2020 counts \times min⁻¹); ^a= adjusted for wear time; ^b= square root transformed.