

Supplementary Materials: Impact of Heart Rate Fragmentation on the Assessment of Heart Rate Variability

Junichiro Hayano, Masaya Kisohara, Norihiro Ueda and Emi Yuda

Table S1. Gender difference in heart rate variability and heart rate fragmentation metrics.

Variable	Male	Female	P
HR, bpm	72.8 ± 0.2	75 ± 0.2	<.0001
SDNN, ms	146 ± 1	143 ± 1	0.0206
rMSSD, ms	39 ± 1	39 ± 1	0.7862
ULF, ln(ms ²)	9.58 ± 0.02	9.62 ± 0.02	0.0894
VLF, ln(ms ²)	7.55 ± 0.01	7.31 ± 0.01	<.0001
LF, ln(ms ²)	6.38 ± 0.02	6.15 ± 0.02	<.0001
HF, ln(ms ²)	5.69 ± 0.02	5.81 ± 0.02	0.0002
VHF, ln(ms ²)	4.82 ± 0.02	4.95 ± 0.02	0.0002
LFHF	2.43 ± 0.03	1.64 ± 0.03	<.0001
PIPh, %	39.5 ± 0.2	40.6 ± 0.2	<.0001
PIPs, %	25.9 ± 0.2	25.6 ± 0.2	0.2377
Wh1, %	16.7 ± 0.1	17 ± 0.1	0.086
Wh2, %	24.2 ± 0.2	25.3 ± 0.2	<.0001
Wh3, %	6.76 ± 0.09	6.79 ± 0.09	0.8209
Ws1, %	5.84 ± 0.05	5.15 ± 0.05	<.0001
Ws2, %	10.8 ± 0.1	10.3 ± 0.1	<.0001
Ws3, %	3.95 ± 0.04	3.83 ± 0.04	0.0326
W0, %	4.19 ± 0.04	3.22 ± 0.04	<.0001
Wm2, %	11.2 ± 0.1	11.7 ± 0.1	<.0001
Wm3, %	16.3 ± 0.1	16.7 ± 0.1	0.0002

Data are least-square means ± standard error of the mean adjusted for the effect of age. HR = 24-h mean heart rate, SDNN = standard deviation of 24-h normal-to-normal R-R (NN) intervals, rMSSD = root mean square of successive difference in NN intervals, ULF = ultra-low frequency (<0.0033 Hz), VLF = very-low frequency (0.0033–0.04 Hz), LF = low frequency (0.04–0.15 Hz), HF = high frequency (0.15–0.4 Hz), VHF = very high frequency (0.4–1.0 Hz), LF/HF = LF-to-LF ratio, PIPh = percentage of hard inflection point, PIPs = percentage of soft inflection point, and variables consisting of letter “W” with the type (h = hard, s = soft, and m = mixed) and number are the word categories of symbolic dynamics for four consecutive NN interval differences (Table 1).