

Heart rate variability parameters obtained from ECG and Polar V800 HRM (mean $\pm$ SD) with % bias and limits of agreement (LoA), intra-class correlation coefficients (ICC), 95% confidence intervals and effect sizes, for each of the correction methods.pdf

For each of the exercise intensities and HR variability parameters a detailed breakdown of each RR interval correction methods are provided, with % bias and limits of agreement (LoA), intra-class correlation coefficients (ICC), 95% confidence intervals and effect sizes. Correction of Polar RR intervals was necessary with large increases in bias, LoA and ES and reduced ICC in all but supine and standing recordings. All correction methods resulted in reduced percentage bias, LoA and ES and increased ICCs for resting and $<60\%$ $\text{VO}_{2\text{MAX}}$ recordings. At greater exercise intensities with the associated increase in artefact occurrence rates while the deletion of artefacts is the simplest of correction techniques it is not recommended; HRV spectral analysis is sensitive to changes in the signal length, discontinuity of the signal and loss of samples, which is reflected in the largest bias, LoA, ES and lowest ICC of any of the correction methods. Linear interpolation produced corrected Polar RR intervals with the lowest bias, LoA, ES and greatest ICC, in most cases. However, caution should be given to RMSSD, LF:HF ratio, SD1 and SampEn at high ($60+ \text{VO}_{2\text{MAX}}$) exercise intensities, as, even when correction methods were applied, acceptably corrected RR intervals were not achieved.

Supine: Heart rate variability parameters obtained from the ECG and Polar V800 HRM (mean $\pm$ SD), % bias and limits of agreement (LoA), intra-class correlation coefficients (ICC) and 95 % confidence intervals and effect sizes.

UNCORRECTED						Magnitude of the Bias	
	ECG	Polar	Correlation	% Bias	LoA	Effect Size	Interpretation
Mean RR (ms)	1046.7 $\pm$ 168.2	1047.2 $\pm$ 168.1	1.00	0.50	-3.45 to 2.44	0.003	Small
SDNN (ms)	81.27 $\pm$ 40.58	83.98 $\pm$ 42.04	0.99	2.71	-16.01 to 10.58	0.066	Small
RMSSD (ms)	75.89 $\pm$ 50.13	81.79 $\pm$ 52.15	0.96	5.90	-34.77 to 22.97	0.115	Small
PNN50 (%)	38.93 $\pm$ 26.49	38.95 $\pm$ 26.39	1.00	0.02	-0.87 to 0.82	0.001	Small
VLF Power (ms ²)	2045.58 $\pm$ 1795.69	2122.64 $\pm$ 1825.75	0.99	77.06	-536.71 to 382.60	0.043	Small
LF Power (ms ²)	1423.70 $\pm$ 1291.45	1576.74 $\pm$ 1472.70	0.96	153.04	-953.79 to 647.72	0.110	Small
HF Power (ms ²)	3978.17 $\pm$ 4800.42	4147.14 $\pm$ 4807.03	1.00	168.97	-1031.31 to 693.38	0.035	Small
nuLF Power	36.84 $\pm$ 16.37	37.51 $\pm$ 16.53	0.99	0.67	-4.26 to 2.91	0.041	Small
nuHF Power	63.01 $\pm$ 16.35	62.35 $\pm$ 16.51	0.99	-0.67	-2.91 to 4.25	0.041	Small
LF:HF Ratio	0.79 $\pm$ 0.93	0.83 $\pm$ 1.02	1.00	0.04	-0.25 to 0.17	0.040	Small
SD1	53.71 $\pm$ 35.48	57.89 $\pm$ 36.91	0.96	4.18	-24.61 to 16.26	0.115	Small
SD2	100.88 $\pm$ 46.86	103.04 $\pm$ 48.21	0.99	2.17	-12.84 to 8.51	0.046	Small
Sample Entropy	1.50 $\pm$ 0.29	1.48 $\pm$ 0.31	0.98	-0.02	-0.10 to 0.15	0.079	Small

DELETION						Magnitude of the Bias	
	ECG	Polar	Correlation	% Bias	LoA	Effect Size	Interpretation
Mean RR (ms)	1046.7 $\pm$ 168.2	1046.6 $\pm$ 168.2	1.00	-0.05	-0.12 to 0.23	0.000	Small
SDNN (ms)	81.27 $\pm$ 40.58	81.30 $\pm$ 40.61	1.00	0.03	-0.24 to 0.18	0.001	Small
RMSSD (ms)	75.89 $\pm$ 50.13	76.00 $\pm$ 50.23	1.00	0.11	-0.73 to 0.52	0.002	Small
PNN50 (%)	38.93 $\pm$ 26.49	38.91 $\pm$ 26.39	1.00	-0.02	-0.72	0.001	Small
VLF Power (ms ²)	2045.58 $\pm$ 1795.69	2049.72 $\pm$ 1798.21	1.00	4.14	-48.54 to 40.26	0.002	Small
LF Power (ms ²)	1423.70 $\pm$ 1291.45	1427.31 $\pm$ 1296.17	1.00	3.61	-26.55 to 19.33	0.003	Small
HF Power (ms ²)	3978.17 $\pm$ 4800.42	3978.78 $\pm$ 4804.67	1.00	0.61	-41.26 to 40.04	0.000	Small
nuLF Power	36.84 $\pm$ 16.37	36.96 $\pm$ 16.64	1.00	0.12	-0.91 to 0.66	0.007	Small
nuHF Power	63.01 $\pm$ 16.35	62.90 $\pm$ 16.63	1.00	-0.12	-0.66 to 0.90	0.007	Small
LF:HF Ratio	0.79 $\pm$ 0.93	0.81 $\pm$ 1.02	1.00	0.03	-0.23 to 0.17	0.027	Small
SD1	53.71 $\pm$ 35.48	53.79 $\pm$ 35.55	1.00	0.07	-0.52 to 0.37	0.002	Small
SD2	100.88 $\pm$ 46.86	100.89 $\pm$ 46.86	1.00	0.01	-0.19 to 0.17	0.000	Small
Sample Entropy	1.50 $\pm$ 0.29	1.50 $\pm$ 0.30	1.00	0.00	-0.04 to 0.05	0.006	Small

MEAN						Magnitude of the Bias	
	ECG	Polar	Correlation	% Bias	LoA	Effect Size	Interpretation
Mean RR (ms)	1046.7 $\pm$ 168.2	1046.6 $\pm$ 168.2	1.00	-0.05	-0.13 to 0.226	0.000	Small
SDNN (ms)	81.27 $\pm$ 40.58	81.25 $\pm$ 40.57	1.00	-0.02	-0.25 to 0.288	0.000	Small
RMSSD (ms)	75.89 $\pm$ 50.13	75.92 $\pm$ 50.19	1.00	0.03	-0.42 to 0.371	0.001	Small
PNN50 (%)	38.93 $\pm$ 26.49	38.88 $\pm$ 26.41	1.00	-0.05	-0.61	0.002	Small
VLF Power (ms ²)	2045.58 $\pm$ 1795.69	2045.23 $\pm$ 1795.82	1.00	-0.35	-7.42 to 8.109	0.000	Small
LF Power (ms ²)	1423.70 $\pm$ 1291.45	1424.58 $\pm$ 1291.95	1.00	0.88	-12.68 to 10.931	0.001	Small
HF Power (ms ²)	3978.17 $\pm$ 4800.42	3980.82 $\pm$ 4804.56	1.00	2.64	-37.07 to 31.786	0.001	Small
nuLF Power	36.84 $\pm$ 16.37	36.91 $\pm$ 16.64	1.00	0.08	-0.82 to 0.669	0.005	Small
nuHF Power	63.01 $\pm$ 16.35	62.94 $\pm$ 16.62	1.00	-0.08	-0.67 to 0.824	0.005	Small
LF:HF Ratio	0.79 $\pm$ 0.93	0.81 $\pm$ 1.02	1.00	0.02	-0.23 to 0.176	0.025	Small
SD1	53.71 $\pm$ 35.48	53.73 $\pm$ 35.52	1.00	0.02	-0.30 to 0.263	0.001	Small
SD2	100.88 $\pm$ 46.86	100.84 $\pm$ 46.82	1.00	-0.04	-0.30 to 0.380	0.001	Small
Sample Entropy	1.50 $\pm$ 0.29	1.50 $\pm$ 0.30	1.00	0.00	-0.04 to 0.045	0.005	Small

LINEAR						Magnitude of the Bias	
	ECG	Polar	Correlation	% Bias	LoA	Effect Size	Interpretation
Mean RR (ms)	1046.7 $\pm$ 168.2	1046.6 $\pm$ 168.2	1.00	-0.05	-0.15 to 0.257	0.000	Small
SDNN (ms)	81.27 $\pm$ 40.58	81.26 $\pm$ 40.58	1.00	-0.01	-0.23 to 0.246	0.000	Small
RMSSD (ms)	75.89 $\pm$ 50.13	75.93 $\pm$ 50.19	1.00	0.03	-0.42 to 0.359	0.001	Small
PNN50 (%)	38.93 $\pm$ 26.49	38.89 $\pm$ 26.41	1.00	-0.04	-0.61	0.002	Small
VLF Power (ms ²)	2045.58 $\pm$ 1795.69	2045.12 $\pm$ 1795.82	1.00	-0.46	-7.18 to 8.096	0.000	Small
LF Power (ms ²)	1423.70 $\pm$ 1291.45	1424.54 $\pm$ 1291.87	1.00	0.84	-12.63 to 10.944	0.001	Small
HF Power (ms ²)	3978.17 $\pm$ 4800.42	3981.37 $\pm$ 4804.44	1.00	3.20	-36.39 to 29.992	0.001	Small
nuLF Power	36.84 $\pm$ 16.37	36.91 $\pm$ 16.64	1.00	0.07	-0.82 to 0.672	0.004	Small
nuHF Power	63.01 $\pm$ 16.35	62.94 $\pm$ 16.62	1.00	-0.07	-0.67 to 0.818	0.004	Small
LF:HF Ratio	0.79 $\pm$ 0.93	0.81 $\pm$ 1.02	1.00	0.02	-0.23 to 0.176	0.025	Small
SD1	53.71 $\pm$ 35.48	53.74 $\pm$ 35.52	1.00	0.02	-0.30 to 0.254	0.001	Small
SD2	100.88 $\pm$ 46.86	100.85 $\pm$ 46.83	1.00	-0.03	-0.26 to 0.316	0.001	Small
Sample Entropy	1.50 $\pm$ 0.29	1.50 $\pm$ 0.30	1.00	0.00	-0.04 to 0.044	0.002	Small

SPLINE							Magnitude of the Bias	
	ECG	Polar	Correlation	% Bias	LoA		Effect Size	Interpretation
Mean RR (ms)	1046.7 ± 168.2	1046.6 ± 168.2	1.00	-0.05	-0.15 to 0.257		0.000	Small
SDNN (ms)	81.27 ± 40.58	81.27 ± 40.58	1.00	0.00	-0.21 to 0.215		0.000	Small
RMSSD (ms)	75.89 ± 50.13	75.92 ± 50.19	1.00	0.02	-0.42 to 0.375		0.000	Small
PNN50 (%)	38.93 ± 26.49	38.87 ± 26.41	1.00	-0.06	-0.58		0.002	Small
VLF Power (ms ²)	2045.58 ± 1795.69	2045.15 ± 1825.75	1.00	-0.43	-7.19 to 8.050		0.000	Small
LF Power (ms ²)	1423.70 ± 1291.45	1424.50 ± 1291.87	1.00	0.80	-12.58 to 10.977		0.001	Small
HF Power (ms ²)	3978.17 ± 4800.42	3981.88 ± 4804.44	1.00	3.71	-35.99 to 28.568		0.001	Small
nuLF Power	36.84 ± 16.37	36.90 ± 16.64	1.00	0.07	-0.82 to 0.677		0.004	Small
nuHF Power	63.01 ± 16.35	62.95 ± 16.62	1.00	-0.07	-0.68 to 0.815		0.004	Small
LF:HF Ratio	0.79 ± 0.93	0.81 ± 1.02	1.00	0.02	-0.23 to 0.176		0.025	Small
SD1	53.71 ± 35.48	53.73 ± 35.52	1.00	0.02	-0.30 to 0.266		0.000	Small
SD2	100.88 ± 46.86	100.86 ± 46.85	1.00	-0.02	-0.20 to 0.233		0.000	Small
Sample Entropy	1.50 ± 0.29	1.50 ± 0.30	1.00	0.00	-0.04 to 0.045		0.005	Small

CUBIC							Magnitude of the Bias	
	ECG	Polar	Correlation	% Bias	LoA		Effect Size	Interpretation
Mean RR (ms)	1046.7 ± 168.2	1046.6 ± 168.2	1.00	-0.05	-0.15 to 0.257		0.000	Small
SDNN (ms)	81.27 ± 40.58	81.26 ± 40.58	1.00	-0.01	-0.22 to 0.233		0.000	Small
RMSSD (ms)	75.89 ± 50.13	75.91 ± 50.18	1.00	0.02	-0.42 to 0.379		0.000	Small
PNN50 (%)	38.93 ± 26.49	38.89 ± 26.41	1.00	-0.04	-0.65		0.002	Small
VLF Power (ms ²)	2045.58 ± 1795.69	2045.13 ± 1795.83	1.00	-0.44	-7.18 to 8.069		0.000	Small
LF Power (ms ²)	1423.70 ± 1291.45	1424.52 ± 1291.86	1.00	0.82	-12.60 to 10.961		0.001	Small
HF Power (ms ²)	3978.17 ± 4800.42	3981.61 ± 4804.44	1.00	3.44	-36.17 to 29.296		0.001	Small
nuLF Power	36.84 ± 16.37	36.91 ± 16.64	1.00	0.07	-0.82 to 0.675		0.004	Small
nuHF Power	63.01 ± 16.35	62.94 ± 16.62	1.00	-0.07	-0.67 to 0.817		0.004	Small
LF:HF Ratio	0.79 ± 0.93	0.81 ± 1.02	1.00	0.02	-0.23 to 0.176		0.025	Small
SD1	53.71 ± 35.48	53.73 ± 35.52	1.00	0.02	-0.30 to 0.268		0.000	Small
SD2	100.88 ± 46.86	100.86 ± 46.84	1.00	-0.02	-0.22 to 0.265		0.000	Small
Sample Entropy	1.50 ± 0.29	1.50 ± 0.30	1.00	0.00	-0.04 to 0.045		0.005	Small

KUBIOS							Magnitude of the Bias	
	ECG	Polar	Correlation	% Bias	LoA		Effect Size	Interpretation
Mean RR (ms)	1046.7 ± 168.2	1046.6 ± 168.2	1.00	-0.05	-0.15 to 0.236		0.000	Small
SDNN (ms)	81.27 ± 40.58	81.30 ± 40.62	1.00	0.03	-0.25 to 0.196		0.001	Small
RMSSD (ms)	75.89 ± 50.13	75.99 ± 50.23	1.00	0.09	-0.69 to 0.507		0.002	Small
PNN50 (%)	38.93 ± 26.49	38.89 ± 26.41	1.00	-0.04	-0.64 to 0.721		0.002	Small
VLF Power (ms ²)	2045.58 ± 1795.69	2044.26 ± 1795.51	1.00	-1.32	-9.13 to 11.767		0.001	Small
LF Power (ms ²)	1423.70 ± 1291.45	1425.25 ± 1293.48	1.00	1.55	-15.34 to 12.231		0.001	Small
HF Power (ms ²)	3978.17 ± 4800.42	3981.69 ± 4804.50	1.00	3.52	-36.11 to 29.077		0.001	Small
nuLF Power	36.84 ± 16.37	36.91 ± 16.64	1.00	0.08	-0.82 to 0.672		0.005	Small
nuHF Power	63.01 ± 16.35	62.94 ± 16.62	1.00	-0.07	-0.67 to 0.821		0.005	Small
LF:HF Ratio	0.79 ± 0.93	0.81 ± 1.02	1.00	0.02	-0.23 to 0.176		0.025	Small
SD1	53.71 ± 35.48	53.78 ± 35.55	1.00	0.07	-0.49 to 0.359		0.002	Small
SD2	100.88 ± 46.86	100.89 ± 46.87	1.00	0.01	-0.19 to 0.166		0.000	Small
Sample Entropy	1.50 ± 0.29	1.50 ± 0.30	1.00	0.00	-0.04 to 0.045		0.005	Small

Standing: Heart rate variability parameters obtained from the ECG and Polar V800 HRM (mean $\pm$ SD), % bias and limits of agreement (LoA), intra-class correlation coefficients (ICC) and 95 % confidence intervals and effect sizes.

UNCORRECTED						Magnitude of the Bias	
	ECG	Polar	Correlation	% Bias	LoA	Effect Size	Interpretation
Mean RR (ms)	762.7 $\pm$ 117.0	762.8 $\pm$ 117.1	1.00	0.13	-1.73 to 1.47	0.001	Small
SDNN (ms)	65.06 $\pm$ 18.19	66.91 $\pm$ 22.42	0.95	1.85	-17.36 to 13.67	0.090	Small
RMSSD (ms)	31.94 $\pm$ 13.88	36.83 $\pm$ 26.05	0.65	4.89	-44.06 to 34.27	0.235	Moderate
PNN50 (%)	8.57 $\pm$ 7.87	8.58 $\pm$ 7.89	1.00	0.02	-1.06 to 1.03	0.002	Small
VLF Power (ms ²)	1176.31 $\pm$ 747.35	1488.60 $\pm$ 1631.40	0.61	312.28	-2886.36 to 2261.79	0.246	Moderate
LF Power (ms ²)	1707.35 $\pm$ 1290.44	2357.83 $\pm$ 3202.75	0.59	650.48	-5859.12 to 4558.17	0.266	Moderate
HF Power (ms ²)	599.34 $\pm$ 489.70	1050.82 $\pm$ 1961.62	0.30	451.48	-4129.17 to 3226.20	0.316	Moderate
nuLF Power	74.89 $\pm$ 9.13	73.96 $\pm$ 9.60	0.89	-0.93	-7.90 to 9.75	0.099	Small
nuHF Power	25.04 $\pm$ 9.13	25.97 $\pm$ 9.60	0.89	0.93	-9.75 to 7.90	0.099	Small
LF:HF Ratio	3.80 $\pm$ 2.93	3.70 $\pm$ 2.98	0.98	-0.11	-1.13 to 1.34	0.036	Small
SD1	22.61 $\pm$ 9.82	26.07 $\pm$ 18.44	0.65	3.46	-31.18 to 24.26	0.235	Moderate
SD2	88.91 $\pm$ 24.32	90.36 $\pm$ 27.50	0.98	1.45	-14.07 to 11.18	0.056	Small
Sample Entropy	0.91 $\pm$ 0.27	0.91 $\pm$ 0.28	0.99	-0.01	-0.06 to 0.07	0.021	Small

DELETION						Magnitude of the Bias	
	ECG	Polar	Correlation	% Bias	LoA	Effect Size	Interpretation
Mean RR (ms)	762.7 $\pm$ 117.0	762.6 $\pm$ 117.0	1.00	-0.09	-0.46 to 0.64	0.001	Small
SDNN (ms)	65.06 $\pm$ 18.19	64.99 $\pm$ 18.14	1.00	-0.07	-0.33 to 0.47	0.004	Small
RMSSD (ms)	31.94 $\pm$ 13.88	31.98 $\pm$ 13.87	1.00	0.04	-0.30 to 0.22	0.003	Small
PNN50 (%)	8.57 $\pm$ 7.87	8.56 $\pm$ 7.88	1.00	0.00	-0.98	0.001	Small
VLF Power (ms ²)	1176.31 $\pm$ 747.35	1168.08 $\pm$ 736.09	1.00	-8.23	-26.40 to 42.86	0.011	Small
LF Power (ms ²)	1707.35 $\pm$ 1290.44	1714.06 $\pm$ 1290.48	1.00	6.71	-68.05 to 54.63	0.005	Small
HF Power (ms ²)	599.34 $\pm$ 489.70	595.30 $\pm$ 486.69	1.00	-4.04	-17.07 to 25.15	0.008	Small
nuLF Power	74.89 $\pm$ 9.13	75.06 $\pm$ 9.21	1.00	0.17	-1.37 to 1.04	0.018	Small
nuHF Power	25.04 $\pm$ 9.13	24.87 $\pm$ 9.20	1.00	-0.17	-1.04 to 1.37	0.018	Small
LF:HF Ratio	3.80 $\pm$ 2.93	3.85 $\pm$ 2.93	1.00	0.04	-0.41 to 0.32	0.015	Small
SD1	22.61 $\pm$ 9.82	22.64 $\pm$ 9.82	1.00	0.03	-0.21 to 0.15	0.003	Small
SD2	88.91 $\pm$ 24.32	88.80 $\pm$ 24.24	1.00	-0.11	-0.48 to 0.70	0.005	Small
Sample Entropy	0.91 $\pm$ 0.27	0.91 $\pm$ 0.27	1.00	0.00	-0.03 to 0.03	0.008	Small

MEAN						Magnitude of the Bias	
	ECG	Polar	Correlation	% Bias	LoA	Effect Size	Interpretation
Mean RR (ms)	762.7 $\pm$ 117.0	762.6 $\pm$ 117.0	1.00	-0.08	-0.39 to 0.553	0.001	Small
SDNN (ms)	65.06 $\pm$ 18.19	64.98 $\pm$ 18.12	1.00	-0.09	-0.33 to 0.496	0.005	Small
RMSSD (ms)	31.94 $\pm$ 13.88	31.97 $\pm$ 13.87	1.00	0.03	-0.31 to 0.242	0.002	Small
PNN50 (%)	8.57 $\pm$ 7.87	8.56 $\pm$ 7.88	1.00	-0.01	-0.97	0.001	Small
VLF Power (ms ²)	1176.31 $\pm$ 747.35	1169.05 $\pm$ 736.93	1.00	-7.26	-24.21 to 38.720	0.010	Small
LF Power (ms ²)	1707.35 $\pm$ 1290.44	1711.26 $\pm$ 1288.74	1.00	3.91	-55.84 to 48.019	0.003	Small
HF Power (ms ²)	599.34 $\pm$ 489.70	595.02 $\pm$ 486.51	1.00	-4.32	-16.72 to 25.353	0.009	Small
nuLF Power	74.89 $\pm$ 9.13	75.04 $\pm$ 9.20	1.00	0.15	-1.25 to 0.946	0.017	Small
nuHF Power	25.04 $\pm$ 9.13	24.89 $\pm$ 9.19	1.00	-0.15	-0.94 to 1.249	0.017	Small
LF:HF Ratio	3.80 $\pm$ 2.93	3.84 $\pm$ 2.93	1.00	0.04	-0.37 to 0.294	0.013	Small
SD1	22.61 $\pm$ 9.82	22.63 $\pm$ 9.82	1.00	0.02	-0.22 to 0.171	0.002	Small
SD2	88.91 $\pm$ 24.32	88.78 $\pm$ 24.21	1.00	-0.13	-0.47 to 0.726	0.005	Small
Sample Entropy	0.91 $\pm$ 0.27	0.91 $\pm$ 0.27	1.00	0.00	-0.03 to 0.027	0.006	Small

LINEAR						Magnitude of the Bias	
	ECG	Polar	Correlation	% Bias	LoA	Effect Size	Interpretation
Mean RR (ms)	762.7 $\pm$ 117.0	762.6 $\pm$ 117.0	1.00	-0.07	-0.39 to 0.529	0.001	Small
SDNN (ms)	65.06 $\pm$ 18.19	64.99 $\pm$ 18.13	1.00	-0.08	-0.33 to 0.481	0.004	Small
RMSSD (ms)	31.94 $\pm$ 13.88	31.97 $\pm$ 13.87	1.00	0.04	-0.30 to 0.228	0.003	Small
PNN50 (%)	8.57 $\pm$ 7.87	8.57 $\pm$ 7.88	1.00	0.00	-1.01	0.000	Small
VLF Power (ms ²)	1176.31 $\pm$ 747.35	1170.48 $\pm$ 738.10	1.00	-5.84	-24.48 to 36.153	0.008	Small
LF Power (ms ²)	1707.35 $\pm$ 1290.44	1711.70 $\pm$ 1289.14	1.00	4.35	-55.96 to 47.253	0.003	Small
HF Power (ms ²)	599.34 $\pm$ 489.70	595.45 $\pm$ 486.59	1.00	-3.89	-16.07 to 23.845	0.008	Small
nuLF Power	74.89 $\pm$ 9.13	75.03 $\pm$ 9.19	1.00	0.14	-1.24 to 0.948	0.016	Small
nuHF Power	25.04 $\pm$ 9.13	24.89 $\pm$ 9.19	1.00	-0.15	-0.94 to 1.236	0.016	Small
LF:HF Ratio	3.80 $\pm$ 2.93	3.84 $\pm$ 2.93	1.00	0.04	-0.37 to 0.294	0.013	Small
SD1	22.61 $\pm$ 9.82	22.63 $\pm$ 9.82	1.00	0.03	-0.21 to 0.161	0.003	Small
SD2	88.91 $\pm$ 24.32	88.79 $\pm$ 24.23	1.00	-0.12	-0.48 to 0.708	0.005	Small
Sample Entropy	0.91 $\pm$ 0.27	0.91 $\pm$ 0.27	1.00	0.00	-0.03 to 0.027	0.007	Small

SPLINE						Magnitude of the Bias	
	ECG	Polar	Correlation	% Bias	LoA	Effect Size	Interpretation
Mean RR (ms)	762.7 ± 117.0	762.6 ± 117.0	1.00	-0.07	-0.39 to 0.529	0.001	Small
SDNN (ms)	65.06 ± 18.19	64.99 ± 18.13	1.00	-0.08	-0.33 to 0.480	0.004	Small
RMSSD (ms)	31.94 ± 13.88	31.97 ± 13.87	1.00	0.04	-0.30 to 0.230	0.003	Small
PNN50 (%)	8.57 ± 7.87	8.56 ± 7.88	1.00	-0.01	-0.97	0.001	Small
VLF Power (ms ²)	1176.31 ± 747.35	1170.50 ± 1631.40	1.00	-5.81	-24.53 to 36.147	0.005	Small
LF Power (ms ²)	1707.35 ± 1290.44	1711.73 ± 1289.17	1.00	4.38	-55.97 to 47.212	0.003	Small
HF Power (ms ²)	599.34 ± 489.70	595.45 ± 486.59	1.00	-3.88	-16.07 to 23.843	0.008	Small
nuLF Power	74.89 ± 9.13	75.03 ± 9.19	1.00	0.14	-1.24 to 0.948	0.016	Small
nuHF Power	25.04 ± 9.13	24.89 ± 9.19	1.00	-0.15	-0.94 to 1.236	0.016	Small
LF:HF Ratio	3.80 ± 2.93	3.84 ± 2.93	1.00	0.04	-0.37 to 0.294	0.013	Small
SD1	22.61 ± 9.82	22.63 ± 9.82	1.00	0.03	-0.21 to 0.163	0.003	Small
SD2	88.91 ± 24.32	88.79 ± 24.23	1.00	-0.12	-0.48 to 0.707	0.005	Small
Sample Entropy	0.91 ± 0.27	0.91 ± 0.27	1.00	0.00	-0.03 to 0.027	0.007	Small

CUBIC						Magnitude of the Bias	
	ECG	Polar	Correlation	% Bias	LoA	Effect Size	Interpretation
Mean RR (ms)	762.7 ± 117.0	762.6 ± 117.0	1.00	-0.07	-0.39 to 0.529	0.001	Small
SDNN (ms)	65.06 ± 18.19	64.99 ± 18.13	1.00	-0.08	-0.33 to 0.480	0.004	Small
RMSSD (ms)	31.94 ± 13.88	31.97 ± 13.87	1.00	0.04	-0.30 to 0.230	0.003	Small
PNN50 (%)	8.57 ± 7.87	8.56 ± 7.88	1.00	-0.01	-0.97	0.001	Small
VLF Power (ms ²)	1176.31 ± 747.35	1170.50 ± 738.12	1.00	-5.81	-24.52 to 36.147	0.008	Small
LF Power (ms ²)	1707.35 ± 1290.44	1711.73 ± 1289.17	1.00	4.38	-55.97 to 47.214	0.003	Small
HF Power (ms ²)	599.34 ± 489.70	595.46 ± 486.59	1.00	-3.88	-16.07 to 23.830	0.008	Small
nuLF Power	74.89 ± 9.13	75.03 ± 9.19	1.00	0.14	-1.24 to 0.948	0.016	Small
nuHF Power	25.04 ± 9.13	24.89 ± 9.19	1.00	-0.15	-0.94 to 1.236	0.016	Small
LF:HF Ratio	3.80 ± 2.93	3.84 ± 2.93	1.00	0.04	-0.37 to 0.294	0.013	Small
SD1	22.61 ± 9.82	22.63 ± 9.82	1.00	0.03	-0.21 to 0.163	0.003	Small
SD2	88.91 ± 24.32	88.79 ± 24.23	1.00	-0.12	-0.48 to 0.707	0.005	Small
Sample Entropy	0.91 ± 0.27	0.91 ± 0.27	1.00	0.00	-0.03 to 0.027	0.007	Small

KUBIOS						Magnitude of the Bias	
	ECG	Polar	Correlation	% Bias	LoA	Effect Size	Interpretation
Mean RR (ms)	762.7 ± 117.0	762.6 ± 117.0	1.00	-0.09	-0.41 to 0.590	0.001	Small
SDNN (ms)	65.06 ± 18.19	64.98 ± 18.13	1.00	-0.08	-0.33 to 0.482	0.004	Small
RMSSD (ms)	31.94 ± 13.88	31.98 ± 13.87	1.00	0.04	-0.30 to 0.224	0.003	Small
PNN50 (%)	8.57 ± 7.87	8.56 ± 7.88	1.00	-0.01	-0.98 to 0.993	0.001	Small
VLF Power (ms ²)	1176.31 ± 747.35	1169.70 ± 737.46	1.00	-6.61	-23.80 to 37.021	0.009	Small
LF Power (ms ²)	1707.35 ± 1290.44	1711.36 ± 1288.83	1.00	4.01	-55.84 to 47.822	0.003	Small
HF Power (ms ²)	599.34 ± 489.70	595.15 ± 486.53	1.00	-4.19	-16.47 to 24.846	0.009	Small
nuLF Power	74.89 ± 9.13	75.04 ± 9.20	1.00	0.15	-1.25 to 0.946	0.016	Small
nuHF Power	25.04 ± 9.13	24.89 ± 9.19	1.00	-0.15	-0.94 to 1.244	0.016	Small
LF:HF Ratio	3.80 ± 2.93	3.84 ± 2.93	1.00	0.04	-0.37 to 0.294	0.013	Small
SD1	22.61 ± 9.82	22.63 ± 9.82	1.00	0.03	-0.21 to 0.159	0.003	Small
SD2	88.91 ± 24.32	88.79 ± 24.23	1.00	-0.12	-0.47 to 0.710	0.005	Small
Sample Entropy	0.91 ± 0.27	0.91 ± 0.27	1.00	0.00	-0.03 to 0.027	0.007	Small

<40%: Heart rate variability parameters obtained from the ECG and Polar V800 HRM (mean $\pm$ SD), % bias and limits of agreement (LoA), intra-class correlation coefficients (ICC) and 95 % confidence intervals and effect sizes.

UNCORRECTED						Magnitude of the Bias	
	ECG	Polar	Correlation	% Bias	LoA	Effect Size	Interpretation
Mean RR (ms)	638.3 $\pm$ 95.7	643.0 $\pm$ 96.1	1.00	4.73	-19.71 to 10.25	0.049	Small
SDNN (ms)	58.33 $\pm$ 28.17	78.50 $\pm$ 32.69	0.60	20.17	-74.23 to 33.89	0.661	Mod - Great
RMSSD (ms)	22.16 $\pm$ 12.52	64.01 $\pm$ 49.05	-0.03	41.85	-141.70 to 58.00	1.169	Great
PNN50 (%)	4.69 $\pm$ 6.17	6.27 $\pm$ 6.02	0.94	1.58	-5.59 to 2.43	0.259	Moderate
VLF Power (ms ²)	1484.39 $\pm$ 2438.11	1855.09 $\pm$ 2404.41	0.97	370.70	-1486.24 to 744.84	0.153	Small
LF Power (ms ²)	863.13 $\pm$ 1067.86	2109.53 $\pm$ 1995.34	0.42	1246.40	-4821.61 to 2328.81	0.779	Great
HF Power (ms ²)	332.62 $\pm$ 401.44	2379.68 $\pm$ 3389.50	-0.21	2047.06	-8901.69 to 4807.57	0.848	Great
nuLF Power	71.46 $\pm$ 13.73	56.67 $\pm$ 16.50	0.21	-14.79	-22.66 to 52.23	0.974	Great
nuHF Power	28.40 $\pm$ 13.68	43.10 $\pm$ 16.37	0.21	14.70	-51.87 to 22.47	0.975	Great
LF:HF Ratio	3.45 $\pm$ 2.43	1.76 $\pm$ 1.30	0.02	-1.69	-3.66 to 7.03	0.866	Great
SD1	15.70 $\pm$ 8.86	45.34 $\pm$ 34.75	-0.03	29.64	-100.38 to 41.11	1.169	Great
SD2	80.02 $\pm$ 39.20	97.57 $\pm$ 39.82	0.80	17.55	-66.05 to 30.96	0.444	Moderate
Sample Entropy	0.80 $\pm$ 0.39	0.61 $\pm$ 0.31	0.61	-0.19	-0.43 to 0.80	0.532	Mod - Great

DELETION						Magnitude of the Bias	
	ECG	Polar	Correlation	% Bias	LoA	Effect Size	Interpretation
Mean RR (ms)	638.3 $\pm$ 95.7	638.4 $\pm$ 95.7	1.00	0.15	-1.04 to 0.74	0.002	Small
SDNN (ms)	58.33 $\pm$ 28.17	58.45 $\pm$ 28.21	1.00	0.12	-0.57 to 0.34	0.004	Small
RMSSD (ms)	22.16 $\pm$ 12.52	22.40 $\pm$ 12.50	1.00	0.24	-0.71 to 0.23	0.019	Small
PNN50 (%)	4.69 $\pm$ 6.17	4.75 $\pm$ 6.20	1.00	0.06	-0.59	0.010	Small
VLF Power (ms ²)	1484.39 $\pm$ 2438.11	1490.24 $\pm$ 2462.96	1.00	5.85	-68.74 to 57.04	0.002	Small
LF Power (ms ²)	863.13 $\pm$ 1067.86	864.71 $\pm$ 1067.09	1.00	1.58	-29.34 to 26.17	0.001	Small
HF Power (ms ²)	332.62 $\pm$ 401.44	331.93 $\pm$ 404.39	1.00	-0.69	-15.70 to 17.09	0.002	Small
nuLF Power	71.46 $\pm$ 13.73	71.59 $\pm$ 13.69	1.00	0.13	-1.59 to 1.33	0.010	Small
nuHF Power	28.40 $\pm$ 13.68	28.28 $\pm$ 13.61	1.00	-0.13	-1.45 to 1.70	0.009	Small
LF:HF Ratio	3.45 $\pm$ 2.43	3.45 $\pm$ 2.40	1.00	0.01	-0.43 to 0.41	0.003	Small
SD1	15.70 $\pm$ 8.86	15.87 $\pm$ 8.85	1.00	0.17	-0.50 to 0.16	0.019	Small
SD2	80.02 $\pm$ 39.20	80.15 $\pm$ 39.27	1.00	0.13	-0.77 to 0.50	0.003	Small
Sample Entropy	0.80 $\pm$ 0.39	0.80 $\pm$ 0.37	0.99	0.00	-0.10 to 0.09	0.005	Small

MEAN						Magnitude of the Bias	
	ECG	Polar	Correlation	% Bias	LoA	Effect Size	Interpretation
Mean RR (ms)	638.3 $\pm$ 95.7	638.2 $\pm$ 95.6	1.00	-0.05	-0.30 to 0.413	0.001	Small
SDNN (ms)	58.33 $\pm$ 28.17	58.32 $\pm$ 28.19	1.00	-0.01	-0.22 to 0.227	0.000	Small
RMSSD (ms)	22.16 $\pm$ 12.52	22.19 $\pm$ 12.55	1.00	0.03	-0.48 to 0.413	0.003	Small
PNN50 (%)	4.69 $\pm$ 6.17	4.67 $\pm$ 6.19	1.00	-0.02	-0.67	0.004	Small
VLF Power (ms ²)	1484.39 $\pm$ 2438.11	1485.94 $\pm$ 2458.15	1.00	1.55	-54.98 to 51.879	0.001	Small
LF Power (ms ²)	863.13 $\pm$ 1067.86	864.27 $\pm$ 1067.88	1.00	1.14	-10.57 to 8.282	0.001	Small
HF Power (ms ²)	332.62 $\pm$ 401.44	331.80 $\pm$ 404.71	1.00	-0.82	-16.81 to 18.461	0.002	Small
nuLF Power	71.46 $\pm$ 13.73	71.59 $\pm$ 13.83	1.00	0.13	-1.79 to 1.521	0.010	Small
nuHF Power	28.40 $\pm$ 13.68	28.28 $\pm$ 13.77	1.00	-0.13	-1.51 to 1.759	0.009	Small
LF:HF Ratio	3.45 $\pm$ 2.43	3.55 $\pm$ 2.71	1.00	0.11	-0.81 to 0.591	0.042	Small
SD1	15.70 $\pm$ 8.86	15.72 $\pm$ 8.89	1.00	0.02	-0.34 to 0.292	0.003	Small
SD2	80.02 $\pm$ 39.20	80.01 $\pm$ 39.23	1.00	-0.01	-0.28 to 0.298	0.000	Small
Sample Entropy	0.80 $\pm$ 0.39	0.79 $\pm$ 0.36	0.99	-0.01	-0.09 to 0.109	0.023	Small

LINEAR						Magnitude of the Bias	
	ECG	Polar	Correlation	% Bias	LoA	Effect Size	Interpretation
Mean RR (ms)	638.3 $\pm$ 95.7	638.2 $\pm$ 95.7	1.00	-0.08	-0.07 to 0.221	0.001	Small
SDNN (ms)	58.33 $\pm$ 28.17	58.35 $\pm$ 28.20	1.00	0.02	-0.13 to 0.090	0.001	Small
RMSSD (ms)	22.16 $\pm$ 12.52	22.27 $\pm$ 12.53	1.00	0.11	-0.44 to 0.208	0.009	Small
PNN50 (%)	4.69 $\pm$ 6.17	4.71 $\pm$ 6.20	1.00	0.02	-0.56	0.004	Small
VLF Power (ms ²)	1484.39 $\pm$ 2438.11	1490.04 $\pm$ 2460.13	1.00	5.65	-51.14 to 39.838	0.002	Small
LF Power (ms ²)	863.13 $\pm$ 1067.86	863.06 $\pm$ 1066.91	1.00	-0.07	-4.53 to 4.659	0.000	Small
HF Power (ms ²)	332.62 $\pm$ 401.44	333.51 $\pm$ 404.15	1.00	0.89	-10.55 to 8.778	0.002	Small
nuLF Power	71.46 $\pm$ 13.73	71.42 $\pm$ 13.73	1.00	-0.04	-1.05 to 1.129	0.003	Small
nuHF Power	28.40 $\pm$ 13.68	28.44 $\pm$ 13.67	1.00	0.04	-1.11 to 1.034	0.003	Small
LF:HF Ratio	3.45 $\pm$ 2.43	3.43 $\pm$ 2.42	1.00	-0.01	-0.14 to 0.160	0.005	Small
SD1	15.70 $\pm$ 8.86	15.78 $\pm$ 8.87	1.00	0.08	-0.31 to 0.147	0.009	Small
SD2	80.02 $\pm$ 39.20	80.04 $\pm$ 39.24	1.00	0.02	-0.15 to 0.111	0.000	Small
Sample Entropy	0.80 $\pm$ 0.39	0.80 $\pm$ 0.37	1.00	0.00	-0.06 to 0.061	0.003	Small

SPLINE							Magnitude of the Bias	
	ECG	Polar	Correlation	% Bias	LoA		Effect Size	Interpretation
Mean RR (ms)	638.3 ± 95.7	638.2 ± 95.7	1.00	-0.08	-0.07 to 0.221		0.001	Small
SDNN (ms)	58.33 ± 28.17	58.35 ± 28.19	1.00	0.02	-0.13 to 0.084		0.001	Small
RMSSD (ms)	22.16 ± 12.52	22.25 ± 12.54	1.00	0.09	-0.42 to 0.233		0.008	Small
PNN50 (%)	4.69 ± 6.17	4.70 ± 6.20	1.00	0.01	-0.60		0.001	Small
VLF Power (ms ²)	1484.39 ± 2438.11	1490.10 ± 2404.41	1.00	5.71	-51.17 to 39.752		0.002	Small
LF Power (ms ²)	863.13 ± 1067.86	863.39 ± 1067.08	1.00	0.26	-5.13 to 4.606		0.000	Small
HF Power (ms ²)	332.62 ± 401.44	333.95 ± 403.95	1.00	1.32	-10.45 to 7.800		0.003	Small
nuLF Power	71.46 ± 13.73	71.35 ± 13.74	1.00	-0.11	-0.83 to 1.056		0.008	Small
nuHF Power	28.40 ± 13.68	28.52 ± 13.68	1.00	0.12	-1.05 to 0.817		0.008	Small
LF:HF Ratio	3.45 ± 2.43	3.42 ± 2.42	1.00	-0.03	-0.16 to 0.214		0.010	Small
SD1	15.70 ± 8.86	15.77 ± 8.88	1.00	0.07	-0.30 to 0.165		0.007	Small
SD2	80.02 ± 39.20	80.05 ± 39.23	1.00	0.02	-0.15 to 0.096		0.001	Small
Sample Entropy	0.80 ± 0.39	0.80 ± 0.37	1.00	0.00	-0.07 to 0.073		0.006	Small

CUBIC							Magnitude of the Bias	
	ECG	Polar	Correlation	% Bias	LoA		Effect Size	Interpretation
Mean RR (ms)	638.3 ± 95.7	638.2 ± 95.7	1.00	-0.09	-0.11 to 0.283		0.001	Small
SDNN (ms)	58.33 ± 28.17	58.36 ± 28.19	1.00	0.03	-0.16 to 0.105		0.001	Small
RMSSD (ms)	22.16 ± 12.52	22.25 ± 12.54	1.00	0.09	-0.42 to 0.235		0.007	Small
PNN50 (%)	4.69 ± 6.17	4.70 ± 6.20	1.00	0.01	-0.60		0.001	Small
VLF Power (ms ²)	1484.39 ± 2438.11	1490.09 ± 2460.11	1.00	5.70	-51.17 to 39.764		0.002	Small
LF Power (ms ²)	863.13 ± 1067.86	863.18 ± 1066.98	1.00	0.05	-5.18 to 5.076		0.000	Small
HF Power (ms ²)	332.62 ± 401.44	333.70 ± 403.99	1.00	1.07	-10.66 to 8.508		0.003	Small
nuLF Power	71.46 ± 13.73	71.37 ± 13.73	1.00	-0.09	-0.90 to 1.083		0.007	Small
nuHF Power	28.40 ± 13.68	28.49 ± 13.67	1.00	0.09	-1.07 to 0.892		0.007	Small
LF:HF Ratio	3.45 ± 2.43	3.43 ± 2.42	1.00	-0.02	-0.17 to 0.207		0.009	Small
SD1	15.70 ± 8.86	15.77 ± 8.88	1.00	0.06	-0.30 to 0.166		0.007	Small
SD2	80.02 ± 39.20	80.05 ± 39.23	1.00	0.03	-0.19 to 0.133		0.001	Small
Sample Entropy	0.80 ± 0.39	0.80 ± 0.37	1.00	0.00	-0.06 to 0.064		0.001	Small

KUBIOS							Magnitude of the Bias	
	ECG	Polar	Correlation	% Bias	LoA		Effect Size	Interpretation
Mean RR (ms)	638.3 ± 95.7	631.0 ± 102.8	0.95	-7.24	-53.10 to 67.576		0.073	Small
SDNN (ms)	58.33 ± 28.17	58.35 ± 28.27	1.00	0.02	-1.96 to 1.911		0.001	Small
RMSSD (ms)	22.16 ± 12.52	21.59 ± 13.10	0.98	-0.57	-4.58 to 5.708		0.044	Small
PNN50 (%)	4.69 ± 6.17	4.67 ± 6.21	1.00	-0.03	-0.53 to 0.585		0.004	Small
VLF Power (ms ²)	1484.39 ± 2438.11	1465.65 ± 2464.50	1.00	-18.74	-123.16 to 160.644		0.008	Small
LF Power (ms ²)	863.13 ± 1067.86	827.27 ± 1079.33	0.99	-35.86	-202.77 to 274.491		0.033	Small
HF Power (ms ²)	332.62 ± 401.44	310.09 ± 409.26	0.98	-22.54	-128.22 to 173.292		0.056	Small
nuLF Power	71.46 ± 13.73	72.81 ± 13.80	0.94	1.35	-10.30 to 7.610		0.098	Small
nuHF Power	28.40 ± 13.68	27.09 ± 13.75	0.95	-1.31	-7.43 to 10.051		0.095	Small
LF:HF Ratio	3.45 ± 2.43	3.70 ± 2.63	0.96	0.26	-1.72 to 1.207		0.101	Small
SD1	15.70 ± 8.86	15.30 ± 9.27	0.98	-0.40	-3.24 to 4.037		0.044	Small
SD2	80.02 ± 39.20	80.12 ± 39.28	1.00	0.10	-2.83 to 2.637		0.003	Small
Sample Entropy	0.80 ± 0.39	0.76 ± 0.37	0.92	-0.04	-0.25 to 0.336		0.109	Small

40% - 60%: Heart rate variability parameters obtained from the ECG and Polar V800 HRM (mean $\pm$ SD), % bias and limits of agreement (LoA), intra-class correlation coefficients (ICC) and 95 % confidence intervals and effect sizes.

UNCORRECTED						Magnitude of the Bias	
	ECG	Polar	Correlation	% Bias	LoA	Effect Size	Interpretation
Mean RR (ms)	513.9 $\pm$ 85.5	524.4 $\pm$ 86.3	0.98	10.48	-41.73 to 20.77	0.122	Small
SDNN (ms)	40.27 $\pm$ 16.64	72.92 $\pm$ 40.51	0.35	32.65	-107.20 to 41.90	1.054	Great
RMSSD (ms)	8.88 $\pm$ 9.00	75.20 $\pm$ 64.76	-0.11	66.32	-196.46 to 63.83	1.434	Great
PNN50 (%)	0.46 $\pm$ 1.66	4.02 $\pm$ 5.42	0.16	3.57	-14.19 to 7.06	0.889	Great
VLF Power (ms ²)	773.63 $\pm$ 838.21	1509.39 $\pm$ 1732.79	0.51	735.76	-3667.03 to 2195.51	0.541	Mod - Great
LF Power (ms ²)	245.02 $\pm$ 763.17	2759.85 $\pm$ 5453.62	0.02	2514.83	-13271.68 to 8242.03	0.646	Mod - Great
HF Power (ms ²)	92.37 $\pm$ 284.17	3271.32 $\pm$ 4776.67	-0.13	3178.94	-12631.57 to 6273.68	0.940	Great
nuLF Power	79.02 $\pm$ 12.69	54.23 $\pm$ 23.97	0.54	-24.79	-14.69 to 64.27	1.292	Great
nuHF Power	20.91 $\pm$ 12.68	45.44 $\pm$ 23.82	0.54	24.53	-63.72 to 14.66	1.285	Great
LF:HF Ratio	6.90 $\pm$ 7.63	4.19 $\pm$ 7.98	0.95	-2.71	-2.32 to 7.74	0.347	Moderate
SD1	6.29 $\pm$ 6.38	53.25 $\pm$ 45.87	-0.11	46.96	-139.13 to 45.21	1.434	Great
SD2	56.39 $\pm$ 22.95	85.55 $\pm$ 40.98	0.52	29.16	-97.95 to 39.63	0.878	Great
Sample Entropy	0.45 $\pm$ 0.25	0.34 $\pm$ 0.20	0.66	-0.11	-0.27 to 0.48	0.463	Moderate

DELETION						Magnitude of the Bias	
	ECG	Polar	Correlation	% Bias	LoA	Effect Size	Interpretation
Mean RR (ms)	513.9 $\pm$ 85.5	514.3 $\pm$ 85.6	1.00	0.37	-2.43 to 1.69	0.004	Small
SDNN (ms)	40.27 $\pm$ 16.64	40.49 $\pm$ 16.77	1.00	0.21	-1.01 to 0.59	0.013	Small
RMSSD (ms)	8.88 $\pm$ 9.00	9.23 $\pm$ 8.88	1.00	0.36	-0.95 to 0.24	0.040	Small
PNN50 (%)	0.46 $\pm$ 1.66	0.46 $\pm$ 1.66	1.00	0.00	-0.03	0.003	Small
VLF Power (ms ²)	773.63 $\pm$ 838.21	784.99 $\pm$ 848.38	1.00	11.36	-108.49 to 85.77	0.013	Small
LF Power (ms ²)	245.02 $\pm$ 763.17	248.35 $\pm$ 765.85	1.00	3.33	-13.36 to 6.70	0.004	Small
HF Power (ms ²)	92.37 $\pm$ 284.17	93.37 $\pm$ 281.65	1.00	1.00	-7.79 to 5.79	0.004	Small
nuLF Power	79.02 $\pm$ 12.69	77.92 $\pm$ 11.98	0.98	-1.10	-4.36 to 6.55	0.089	Small
nuHF Power	20.91 $\pm$ 12.68	21.98 $\pm$ 11.98	0.98	1.07	-6.46 to 4.31	0.087	Small
LF:HF Ratio	6.90 $\pm$ 7.63	6.20 $\pm$ 7.35	0.98	-0.70	-2.54 to 3.95	0.094	Small
SD1	6.29 $\pm$ 6.38	6.55 $\pm$ 6.30	1.00	0.25	-0.67 to 0.17	0.040	Small
SD2	56.39 $\pm$ 22.95	56.66 $\pm$ 23.15	1.00	0.27	-1.39 to 0.84	0.012	Small
Sample Entropy	0.45 $\pm$ 0.25	0.49 $\pm$ 0.24	0.98	0.04	-0.15 to 0.06	0.179	Small

MEAN						Magnitude of the Bias	
	ECG	Polar	Correlation	% Bias	LoA	Effect Size	Interpretation
Mean RR (ms)	513.9 $\pm$ 85.5	513.8 $\pm$ 85.5	1.00	-0.05	-0.10 to 0.198	0.001	Small
SDNN (ms)	40.27 $\pm$ 16.64	40.28 $\pm$ 16.63	1.00	0.00	-0.11 to 0.104	0.000	Small
RMSSD (ms)	8.88 $\pm$ 9.00	9.05 $\pm$ 8.92	1.00	0.17	-0.79 to 0.449	0.019	Small
PNN50 (%)	0.46 $\pm$ 1.66	0.46 $\pm$ 1.66	-	0.00	-	0.000	Small
VLF Power (ms ²)	773.63 $\pm$ 838.21	771.81 $\pm$ 838.88	1.00	-1.82	-3.45 to 7.093	0.002	Small
LF Power (ms ²)	245.02 $\pm$ 763.17	245.54 $\pm$ 766.52	1.00	0.53	-7.90 to 6.846	0.001	Small
HF Power (ms ²)	92.37 $\pm$ 284.17	92.13 $\pm$ 281.76	1.00	-0.25	-4.85 to 5.339	0.001	Small
nuLF Power	79.02 $\pm$ 12.69	78.07 $\pm$ 12.06	0.98	-0.95	-3.72 to 5.611	0.077	Small
nuHF Power	20.91 $\pm$ 12.68	21.84 $\pm$ 12.05	0.98	0.94	-5.55 to 3.680	0.076	Small
LF:HF Ratio	6.90 $\pm$ 7.63	6.26 $\pm$ 7.34	0.98	-0.65	-2.56 to 3.854	0.087	Small
SD1	6.29 $\pm$ 6.38	6.41 $\pm$ 6.33	1.00	0.12	-0.56 to 0.317	0.019	Small
SD2	56.39 $\pm$ 22.95	56.38 $\pm$ 22.95	1.00	-0.01	-0.13 to 0.151	0.000	Small
Sample Entropy	0.45 $\pm$ 0.25	0.47 $\pm$ 0.24	0.98	0.03	-0.13 to 0.070	0.113	Small

LINEAR						Magnitude of the Bias	
	ECG	Polar	Correlation	% Bias	LoA	Effect Size	Interpretation
Mean RR (ms)	513.9 $\pm$ 85.5	513.9 $\pm$ 85.5	1.00	-0.03	-0.09 to 0.157	0.000	Small
SDNN (ms)	40.27 $\pm$ 16.64	40.30 $\pm$ 16.64	1.00	0.03	-0.13 to 0.075	0.002	Small
RMSSD (ms)	8.88 $\pm$ 9.00	9.11 $\pm$ 8.90	1.00	0.23	-0.80 to 0.340	0.026	Small
PNN50 (%)	0.46 $\pm$ 1.66	0.46 $\pm$ 1.66	-	0.00	-	0.000	Small
VLF Power (ms ²)	773.63 $\pm$ 838.21	773.98 $\pm$ 838.92	1.00	0.35	-2.59 to 1.892	0.000	Small
LF Power (ms ²)	245.02 $\pm$ 763.17	245.91 $\pm$ 766.44	1.00	0.89	-7.33 to 5.548	0.001	Small
HF Power (ms ²)	92.37 $\pm$ 284.17	91.99 $\pm$ 281.87	1.00	-0.38	-4.34 to 5.109	0.001	Small
nuLF Power	79.02 $\pm$ 12.69	78.44 $\pm$ 12.19	0.99	-0.59	-3.05 to 4.219	0.047	Small
nuHF Power	20.91 $\pm$ 12.68	21.48 $\pm$ 12.18	0.99	0.57	-4.15 to 3.004	0.046	Small
LF:HF Ratio	6.90 $\pm$ 7.63	6.37 $\pm$ 7.31	0.98	-0.54	-2.53 to 3.603	0.072	Small
SD1	6.29 $\pm$ 6.38	6.46 $\pm$ 6.31	1.00	0.16	-0.57 to 0.241	0.026	Small
SD2	56.39 $\pm$ 22.95	56.41 $\pm$ 22.96	1.00	0.02	-0.11 to 0.070	0.001	Small
Sample Entropy	0.45 $\pm$ 0.25	0.48 $\pm$ 0.24	0.98	0.04	-0.13 to 0.060	0.144	Small

SPLINE							Magnitude of the Bias	
	ECG	Polar	Correlation	% Bias	LoA		Effect Size	Interpretation
Mean RR (ms)	513.9 ± 85.5	513.9 ± 85.5	1.00	-0.04	-0.09 to 0.157		0.000	Small
SDNN (ms)	40.27 ± 16.64	40.30 ± 16.64	1.00	0.03	-0.13 to 0.076		0.002	Small
RMSSD (ms)	8.88 ± 9.00	9.09 ± 8.91	1.00	0.22	-0.80 to 0.367		0.024	Small
PNN50 (%)	0.46 ± 1.66	0.46 ± 1.66	-	0.00	-		0.000	Small
VLF Power (ms ²)	773.63 ± 838.21	773.98 ± 1732.79	1.00	0.35	-2.62 to 1.921		0.000	Small
LF Power (ms ²)	245.02 ± 763.17	245.97 ± 766.42	1.00	0.95	-7.37 to 5.471		0.001	Small
HF Power (ms ²)	92.37 ± 284.17	92.07 ± 281.86	1.00	-0.31	-4.43 to 5.037		0.001	Small
nuLF Power	79.02 ± 12.69	78.35 ± 12.22	0.99	-0.67	-2.77 to 4.117		0.054	Small
nuHF Power	20.91 ± 12.68	21.57 ± 12.21	0.99	0.66	-4.05 to 2.724		0.053	Small
LF:HF Ratio	6.90 ± 7.63	6.35 ± 7.31	0.98	-0.55	-2.49 to 3.599		0.074	Small
SD1	6.29 ± 6.38	6.45 ± 6.32	1.00	0.15	-0.56 to 0.260		0.024	Small
SD2	56.39 ± 22.95	56.42 ± 22.96	1.00	0.02	-0.12 to 0.069		0.001	Small
Sample Entropy	0.45 ± 0.25	0.48 ± 0.24	0.98	0.04	-0.13 to 0.062		0.144	Small

CUBIC							Magnitude of the Bias	
	ECG	Polar	Correlation	% Bias	LoA		Effect Size	Interpretation
Mean RR (ms)	513.9 ± 85.5	513.9 ± 85.5	1.00	-0.04	-0.09 to 0.157		0.000	Small
SDNN (ms)	40.27 ± 16.64	40.30 ± 16.64	1.00	0.03	-0.13 to 0.076		0.002	Small
RMSSD (ms)	8.88 ± 9.00	9.09 ± 8.91	1.00	0.21	-0.80 to 0.369		0.024	Small
PNN50 (%)	0.46 ± 1.66	0.46 ± 1.66	-	0.00	-		0.000	Small
VLF Power (ms ²)	773.63 ± 838.21	773.98 ± 838.90	1.00	0.34	-2.63 to 1.941		0.000	Small
LF Power (ms ²)	245.02 ± 763.17	245.96 ± 766.42	1.00	0.95	-7.37 to 5.479		0.001	Small
HF Power (ms ²)	92.37 ± 284.17	92.04 ± 281.86	1.00	-0.33	-4.39 to 5.062		0.001	Small
nuLF Power	79.02 ± 12.69	78.37 ± 12.21	0.99	-0.65	-2.87 to 4.167		0.052	Small
nuHF Power	20.91 ± 12.68	21.54 ± 12.20	0.99	0.64	-4.10 to 2.825		0.051	Small
LF:HF Ratio	6.90 ± 7.63	6.35 ± 7.31	0.98	-0.55	-2.51 to 3.605		0.074	Small
SD1	6.29 ± 6.38	6.45 ± 6.32	1.00	0.15	-0.56 to 0.261		0.024	Small
SD2	56.39 ± 22.95	56.41 ± 22.96	1.00	0.02	-0.11 to 0.069		0.001	Small
Sample Entropy	0.45 ± 0.25	0.48 ± 0.24	0.98	0.03	-0.13 to 0.060		0.142	Small

KUBIOS							Magnitude of the Bias	
	ECG	Polar	Correlation	% Bias	LoA		Effect Size	Interpretation
Mean RR (ms)	513.9 ± 85.5	508.7 ± 90.8	0.97	-5.20	-39.41 to 49.816		0.059	Small
SDNN (ms)	40.27 ± 16.64	39.00 ± 16.98	0.94	-1.28	-10.21 to 12.759		0.076	Small
RMSSD (ms)	8.88 ± 9.00	8.98 ± 8.96	1.00	0.10	-1.18 to 0.975		0.012	Small
PNN50 (%)	0.46 ± 1.66	0.46 ± 1.66	1.00	0.00	-0.01 to 0.009		0.001	Small
VLF Power (ms ²)	773.63 ± 838.21	732.33 ± 850.81	0.98	-41.30	-301.91 to 384.511		0.049	Small
LF Power (ms ²)	245.02 ± 763.17	244.63 ± 766.87	1.00	-0.39	-15.78 to 16.564		0.001	Small
HF Power (ms ²)	92.37 ± 284.17	92.15 ± 281.78	1.00	-0.22	-5.29 to 5.733		0.001	Small
nuLF Power	79.02 ± 12.69	75.42 ± 15.39	0.67	-3.60	-19.32 to 26.522		0.255	Moderate
nuHF Power	20.91 ± 12.68	24.44 ± 15.25	0.68	3.53	-26.00 to 18.937		0.252	Moderate
LF:HF Ratio	6.90 ± 7.63	6.01 ± 7.46	0.96	-0.90	-3.07 to 4.872		0.119	Small
SD1	6.29 ± 6.38	6.37 ± 6.35	1.00	0.07	-0.84 to 0.694		0.012	Small
SD2	56.39 ± 22.95	54.58 ± 23.43	0.94	-1.81	-14.34 to 17.958		0.078	Small
Sample Entropy	0.45 ± 0.25	0.49 ± 0.23	0.96	0.05	-0.19 to 0.097		0.200	Small

60% - 80%: Heart rate variability parameters obtained from the ECG and Polar V800 HRM (mean $\pm$ SD), % bias and limits of agreement (LoA), intra-class correlation coefficients (ICC) and 95 % confidence intervals and effect sizes.

UNCORRECTED						Magnitude of the Bias	
	ECG	Polar	Correlation	% Bias	LoA	Effect Size	Interpretation
Mean RR (ms)	406.4 $\pm$ 48.7	419.3 $\pm$ 48.2	0.94	12.92	-46.28 to 20.44	0.267	Moderate
SDNN (ms)	27.38 $\pm$ 13.09	69.04 $\pm$ 36.75	0.20	41.66	-113.12 to 29.79	1.510	Great
RMSSD (ms)	3.19 $\pm$ 1.07	81.89 $\pm$ 53.34	0.04	78.70	-183.17 to 25.78	2.086	Great
PNN50 (%)	0.00 $\pm$ 0.00	5.35 $\pm$ 6.04	0.00	5.35	-17.19 to 6.49	1.252	Great
VLF Power (ms ²)	279.74 $\pm$ 222.90	880.33 $\pm$ 859.84	0.30	600.59	-2208.86 to 1007.68	0.956	Great
LF Power (ms ²)	3.71 $\pm$ 3.14	1248.88 $\pm$ 1392.27	-0.21	1245.17	-3975.32 to 1484.98	1.265	Great
HF Power (ms ²)	1.83 $\pm$ 2.61	2777.50 $\pm$ 3226.70	0.01	2775.67	-9099.94 to 3548.60	1.217	Great
nuLF Power	70.95 $\pm$ 23.51	40.46 $\pm$ 19.97	0.36	-30.48	-17.90 to 78.86	1.397	Great
nuHF Power	28.48 $\pm$ 22.98	59.09 $\pm$ 19.84	0.36	30.62	-78.41 to 17.18	1.426	Great
LF:HF Ratio	5.64 $\pm$ 5.45	1.47 $\pm$ 2.65	0.47	-4.17	-5.28 to 13.63	0.974	Great
SD1	2.26 $\pm$ 0.76	57.98 $\pm$ 37.76	0.04	55.72	-129.68 to 18.25	2.086	Great
SD2	38.54 $\pm$ 18.46	76.94 $\pm$ 38.51	0.31	38.40	-111.49 to 34.68	1.272	Great
Sample Entropy	0.34 $\pm$ 0.22	0.24 $\pm$ 0.31	0.61	-0.10	-0.38 to 0.58	0.370	Moderate

DELETION						Magnitude of the Bias	
	ECG	Polar	Correlation	% Bias	LoA	Effect Size	Interpretation
Mean RR (ms)	406.4 $\pm$ 48.7	406.5 $\pm$ 48.5	1.00	0.08	-2.42 to 2.25	0.002	Small
SDNN (ms)	27.38 $\pm$ 13.09	27.37 $\pm$ 13.04	1.00	-0.01	-1.59 to 1.60	0.001	Small
RMSSD (ms)	3.19 $\pm$ 1.07	3.75 $\pm$ 1.06	0.95	0.56	-1.25 to 0.13	0.527	Mod - Great
PNN50 (%)	0.00 $\pm$ 0.00	0.00 $\pm$ 0.00	-	0.00	-	0.000	Small
VLF Power (ms ²)	279.74 $\pm$ 222.90	276.96 $\pm$ 219.54	0.98	-2.77	-75.62 to 81.17	0.013	Small
LF Power (ms ²)	3.71 $\pm$ 3.14	4.15 $\pm$ 3.49	0.94	0.44	-2.71 to 1.83	0.132	Small
HF Power (ms ²)	1.83 $\pm$ 2.61	2.25 $\pm$ 3.10	0.98	0.42	-1.89 to 1.05	0.146	Small
nuLF Power	70.95 $\pm$ 23.51	67.11 $\pm$ 21.59	0.93	-3.84	-13.06 to 20.74	0.170	Small
nuHF Power	28.48 $\pm$ 22.98	32.60 $\pm$ 21.57	0.93	4.12	-20.42 to 12.18	0.185	Small
LF:HF Ratio	5.64 $\pm$ 5.45	3.71 $\pm$ 3.07	0.67	-1.93	-6.10 to 9.97	0.437	Moderate
SD1	2.26 $\pm$ 0.76	2.66 $\pm$ 0.75	0.95	0.40	-0.89 to 0.09	0.525	Mod - Great
SD2	38.54 $\pm$ 18.46	38.48 $\pm$ 18.43	1.00	-0.05	-2.20 to 2.31	0.003	Small
Sample Entropy	0.34 $\pm$ 0.22	0.45 $\pm$ 0.34	0.92	0.11	-0.42 to 0.20	0.376	Moderate

MEAN						Magnitude of the Bias	
	ECG	Polar	Correlation	% Bias	LoA	Effect Size	Interpretation
Mean RR (ms)	406.4 $\pm$ 48.7	406.4 $\pm$ 48.7	1.00	-0.02	-0.11 to 0.150	0.000	Small
SDNN (ms)	27.38 $\pm$ 13.09	27.42 $\pm$ 13.03	1.00	0.05	-0.19 to 0.097	0.004	Small
RMSSD (ms)	3.19 $\pm$ 1.07	3.59 $\pm$ 1.02	0.95	0.40	-1.02 to 0.228	0.380	Moderate
PNN50 (%)	0.00 $\pm$ 0.00	0.00 $\pm$ 0.00	-	0.00	-	0.000	Small
VLF Power (ms ²)	279.74 $\pm$ 222.90	279.62 $\pm$ 222.79	1.00	-0.12	-3.39 to 3.624	0.001	Small
LF Power (ms ²)	3.71 $\pm$ 3.14	3.88 $\pm$ 3.15	0.99	0.17	-1.01 to 0.681	0.053	Small
HF Power (ms ²)	1.83 $\pm$ 2.61	2.20 $\pm$ 2.97	0.99	0.37	-1.40 to 0.665	0.132	Small
nuLF Power	70.95 $\pm$ 23.51	66.49 $\pm$ 22.05	0.95	-4.45	-9.78 to 18.684	0.195	Small
nuHF Power	28.48 $\pm$ 22.98	32.87 $\pm$ 21.61	0.95	4.39	-18.13 to 9.341	0.197	Small
LF:HF Ratio	5.64 $\pm$ 5.45	3.60 $\pm$ 2.85	0.71	-2.05	-5.70 to 9.795	0.471	Moderate
SD1	2.26 $\pm$ 0.76	2.55 $\pm$ 0.73	0.96	0.28	-0.72 to 0.162	0.377	Moderate
SD2	38.54 $\pm$ 18.46	38.58 $\pm$ 18.41	1.00	0.04	-0.19 to 0.110	0.002	Small
Sample Entropy	0.34 $\pm$ 0.22	0.41 $\pm$ 0.31	0.94	0.07	-0.33 to 0.181	0.266	Moderate

LINEAR						Magnitude of the Bias	
	ECG	Polar	Correlation	% Bias	LoA	Effect Size	Interpretation
Mean RR (ms)	406.4 $\pm$ 48.7	406.4 $\pm$ 48.7	1.00	-0.03	-0.05 to 0.101	0.001	Small
SDNN (ms)	27.38 $\pm$ 13.09	27.43 $\pm$ 13.04	1.00	0.05	-0.17 to 0.071	0.004	Small
RMSSD (ms)	3.19 $\pm$ 1.07	3.65 $\pm$ 1.03	0.95	0.46	-1.09 to 0.174	0.436	Moderate
PNN50 (%)	0.00 $\pm$ 0.00	0.00 $\pm$ 0.00	-	0.00	-	0.000	Small
VLF Power (ms ²)	279.74 $\pm$ 222.90	279.68 $\pm$ 222.79	1.00	-0.05	-0.84 to 0.947	0.000	Small
LF Power (ms ²)	3.71 $\pm$ 3.14	3.73 $\pm$ 3.17	1.00	0.02	-0.15 to 0.111	0.006	Small
HF Power (ms ²)	1.83 $\pm$ 2.61	2.09 $\pm$ 2.98	0.99	0.27	-1.19 to 0.657	0.095	Small
nuLF Power	70.95 $\pm$ 23.51	67.82 $\pm$ 23.73	0.98	-3.12	-5.72 to 11.969	0.132	Small
nuHF Power	28.48 $\pm$ 22.98	31.47 $\pm$ 23.17	0.98	2.99	-11.68 to 5.689	0.130	Small
LF:HF Ratio	5.64 $\pm$ 5.45	4.37 $\pm$ 3.61	0.93	-1.28	-3.56 to 6.121	0.276	Moderate
SD1	2.26 $\pm$ 0.76	2.59 $\pm$ 0.73	0.95	0.32	-0.77 to 0.124	0.434	Moderate
SD2	38.54 $\pm$ 18.46	38.58 $\pm$ 18.43	1.00	0.04	-0.13 to 0.059	0.002	Small
Sample Entropy	0.34 $\pm$ 0.22	0.43 $\pm$ 0.32	0.95	0.09	-0.34 to 0.159	0.331	Moderate

SPLINE						Magnitude of the Bias	
	ECG	Polar	Correlation	% Bias	LoA	Effect Size	Interpretation
Mean RR (ms)	406.4 ± 48.7	406.4 ± 48.7	1.00	-0.03	-0.05 to 0.101	0.001	Small
SDNN (ms)	27.38 ± 13.09	27.43 ± 13.04	1.00	0.05	-0.17 to 0.070	0.004	Small
RMSSD (ms)	3.19 ± 1.07	3.64 ± 1.03	0.95	0.45	-1.08 to 0.184	0.427	Moderate
PNN50 (%)	0.00 ± 0.00	0.00 ± 0.00	-	0.00	-	0.000	Small
VLF Power (ms ²)	279.74 ± 222.90	279.69 ± 859.84	1.00	-0.05	-0.85 to 0.952	0.000	Small
LF Power (ms ²)	3.71 ± 3.14	3.74 ± 3.17	1.00	0.03	-0.15 to 0.101	0.008	Small
HF Power (ms ²)	1.83 ± 2.61	2.13 ± 3.03	0.99	0.30	-1.30 to 0.702	0.106	Small
nuLF Power	70.95 ± 23.51	67.57 ± 23.70	0.98	-3.38	-5.21 to 11.961	0.143	Small
nuHF Power	28.48 ± 22.98	31.71 ± 23.11	0.98	3.23	-11.65 to 5.184	0.140	Small
LF:HF Ratio	5.64 ± 5.45	4.24 ± 3.47	0.93	-1.40	-3.68 to 6.486	0.307	Moderate
SD1	2.26 ± 0.76	2.58 ± 0.73	0.95	0.32	-0.76 to 0.131	0.425	Moderate
SD2	38.54 ± 18.46	38.58 ± 18.43	1.00	0.04	-0.14 to 0.058	0.002	Small
Sample Entropy	0.34 ± 0.22	0.43 ± 0.32	0.95	0.09	-0.34 to 0.155	0.340	Moderate

CUBIC						Magnitude of the Bias	
	ECG	Polar	Correlation	% Bias	LoA	Effect Size	Interpretation
Mean RR (ms)	406.4 ± 48.7	406.4 ± 48.7	1.00	-0.03	-0.05 to 0.101	0.001	Small
SDNN (ms)	27.38 ± 13.09	27.43 ± 13.04	1.00	0.05	-0.17 to 0.071	0.004	Small
RMSSD (ms)	3.19 ± 1.07	3.63 ± 1.03	0.95	0.44	-1.08 to 0.189	0.423	Moderate
PNN50 (%)	0.00 ± 0.00	0.00 ± 0.00	-	0.00	-	0.000	Small
VLF Power (ms ²)	279.74 ± 222.90	279.69 ± 222.79	1.00	-0.05	-0.85 to 0.949	0.000	Small
LF Power (ms ²)	3.71 ± 3.14	3.73 ± 3.17	1.00	0.02	-0.15 to 0.103	0.007	Small
HF Power (ms ²)	1.83 ± 2.61	2.11 ± 3.01	0.99	0.29	-1.26 to 0.686	0.102	Small
nuLF Power	70.95 ± 23.51	67.65 ± 23.71	0.98	-3.30	-5.36 to 11.946	0.140	Small
nuHF Power	28.48 ± 22.98	31.64 ± 23.13	0.98	3.16	-11.64 to 5.331	0.137	Small
LF:HF Ratio	5.64 ± 5.45	4.29 ± 3.54	0.93	-1.35	-3.55 to 6.252	0.294	Moderate
SD1	2.26 ± 0.76	2.58 ± 0.73	0.95	0.31	-0.76 to 0.134	0.421	Moderate
SD2	38.54 ± 18.46	38.58 ± 18.43	1.00	0.04	-0.14 to 0.058	0.002	Small
Sample Entropy	0.34 ± 0.22	0.43 ± 0.32	0.95	0.09	-0.34 to 0.157	0.331	Moderate

KUBIOS						Magnitude of the Bias	
	ECG	Polar	Correlation	% Bias	LoA	Effect Size	Interpretation
Mean RR (ms)	406.4 ± 48.7	408.3 ± 48.2	0.99	1.85	-17.56 to 13.848	0.038	Small
SDNN (ms)	27.38 ± 13.09	29.48 ± 15.30	0.81	2.10	-19.89 to 15.679	0.148	Small
RMSSD (ms)	3.19 ± 1.07	3.89 ± 1.11	0.82	0.70	-1.99 to 0.582	0.645	Mod - Great
PNN50 (%)	0.00 ± 0.00	0.01 ± 0.06	0.00	0.01	-0.13 to 0.104	0.333	Moderate
VLF Power (ms ²)	279.74 ± 222.90	334.16 ± 303.75	0.62	54.42	-524.34 to 415.492	0.204	Moderate
LF Power (ms ²)	3.71 ± 3.14	4.80 ± 3.84	0.66	1.09	-6.90 to 4.731	0.309	Moderate
HF Power (ms ²)	1.83 ± 2.61	2.49 ± 3.19	0.98	0.66	-2.36 to 1.042	0.227	Moderate
nuLF Power	70.95 ± 23.51	67.61 ± 20.62	0.91	-3.34	-16.11 to 22.786	0.151	Small
nuHF Power	28.48 ± 22.98	31.77 ± 20.16	0.91	3.29	-22.40 to 15.830	0.152	Small
LF:HF Ratio	5.64 ± 5.45	3.57 ± 2.79	0.56	-2.08	-6.82 to 10.969	0.479	Moderate
SD1	2.26 ± 0.76	2.76 ± 0.79	0.82	0.50	-1.41 to 0.411	0.643	Mod - Great
SD2	38.54 ± 18.46	41.49 ± 21.61	0.81	2.95	-28.09 to 22.199	0.147	Small
Sample Entropy	0.34 ± 0.22	0.41 ± 0.33	0.93	0.07	-0.35 to 0.206	0.261	Moderate

80% - 100%: Heart rate variability parameters obtained from the ECG and Polar V800 HRM (mean $\pm$ SD), % bias and limits of agreement (LoA), intra-class correlation coefficients (ICC) and 95 % confidence intervals and effect sizes.

UNCORRECTED						Magnitude of the Bias	
	ECG	Polar	Correlation	% Bias	LoA	Effect Size	Interpretation
Mean RR (ms)	352.3 $\pm$ 43.9	372.4 $\pm$ 49.6	0.93	20.11	-56.80 to 16.57	0.429	Moderate
SDNN (ms)	20.51 $\pm$ 19.90	80.73 $\pm$ 48.98	0.41	60.22	-147.70 to 27.25	1.611	Great
RMSSD (ms)	3.38 $\pm$ 1.13	99.91 $\pm$ 64.15	0.07	96.53	-222.13 to 29.07	2.128	Great
PNN50 (%)	0.00 $\pm$ 0.00	8.33 $\pm$ 7.36	0.00	8.33	-22.75 to 6.09	1.601	Great
VLF Power (ms ²)	198.99 $\pm$ 433.01	1513.61 $\pm$ 2445.72	0.48	1314.62	-5761.43 to 3132.20	0.749	Great
LF Power (ms ²)	3.05 $\pm$ 9.28	2929.14 $\pm$ 5322.55	0.09	2926.09	-13356.64 to 7504.46	0.777	Great
HF Power (ms ²)	0.92 $\pm$ 2.00	4505.01 $\pm$ 7837.54	0.07	4504.09	-19865.40 to #####	0.813	Great
nuLF Power	54.00 $\pm$ 20.51	38.73 $\pm$ 11.23	0.39	-15.28	-22.30 to 52.85	0.924	Great
nuHF Power	45.63 $\pm$ 20.41	60.88 $\pm$ 11.12	0.38	15.25	-52.79 to 22.29	0.928	Great
LF:HF Ratio	1.77 $\pm$ 1.51	0.74 $\pm$ 0.63	0.49	-1.03	-1.55 to 3.62	0.895	Great
SD1	2.39 $\pm$ 0.80	70.72 $\pm$ 45.41	0.07	68.32	-157.24 to 20.59	2.127	Great
SD2	28.80 $\pm$ 28.14	88.85 $\pm$ 53.59	0.48	60.05	-152.62 to 32.53	1.403	Great
Sample Entropy	0.62 $\pm$ 0.38	0.25 $\pm$ 0.20	0.35	-0.36	-0.34 to 1.07	1.206	Great

DELETION						Magnitude of the Bias	
	ECG	Polar	Correlation	% Bias	LoA	Effect Size	Interpretation
Mean RR (ms)	352.3 $\pm$ 43.9	352.4 $\pm$ 44.2	1.00	0.04	-1.79 to 1.70	0.001	Small
SDNN (ms)	20.51 $\pm$ 19.90	20.56 $\pm$ 19.73	1.00	0.06	-0.73 to 0.62	0.003	Small
RMSSD (ms)	3.38 $\pm$ 1.13	3.96 $\pm$ 1.10	0.86	0.58	-1.74 to 0.59	0.518	Moderate
PNN50 (%)	0.00 $\pm$ 0.00	0.00 $\pm$ 0.00	-	0.00	-	0.000	Small
VLF Power (ms ²)	198.99 $\pm$ 433.01	200.13 $\pm$ 428.35	1.00	1.13	-47.49 to 45.22	0.003	Small
LF Power (ms ²)	3.05 $\pm$ 9.28	3.17 $\pm$ 9.50	1.00	0.12	-0.64 to 0.40	0.013	Small
HF Power (ms ²)	0.92 $\pm$ 2.00	1.13 $\pm$ 2.38	0.99	0.21	-1.19 to 0.77	0.097	Small
nuLF Power	54.00 $\pm$ 20.51	51.43 $\pm$ 18.35	0.88	-2.58	-16.51 to 21.66	0.132	Small
nuHF Power	45.63 $\pm$ 20.41	48.12 $\pm$ 18.22	0.88	2.49	-21.21 to 16.23	0.129	Small
LF:HF Ratio	1.77 $\pm$ 1.51	1.43 $\pm$ 1.06	0.86	-0.34	-1.24 to 1.93	0.264	Moderate
SD1	2.39 $\pm$ 0.80	2.80 $\pm$ 0.78	0.86	0.41	-1.23 to 0.41	0.516	Moderate
SD2	28.80 $\pm$ 28.14	28.81 $\pm$ 27.93	1.00	0.01	-0.98 to 0.96	0.000	Small
Sample Entropy	0.62 $\pm$ 0.38	0.74 $\pm$ 0.46	0.93	0.13	-0.47 to 0.22	0.301	Moderate

MEAN						Magnitude of the Bias	
	ECG	Polar	Correlation	% Bias	LoA	Effect Size	Interpretation
Mean RR (ms)	352.3 $\pm$ 43.9	352.3 $\pm$ 43.9	1.00	-0.02	-0.11 to 0.152	0.000	Small
SDNN (ms)	20.51 $\pm$ 19.90	20.59 $\pm$ 19.86	1.00	0.08	-0.28 to 0.124	0.004	Small
RMSSD (ms)	3.38 $\pm$ 1.13	3.72 $\pm$ 1.12	0.84	0.34	-1.58 to 0.897	0.303	Moderate
PNN50 (%)	0.00 $\pm$ 0.00	0.00 $\pm$ 0.00	-	0.00	-	0.000	Small
VLF Power (ms ²)	198.99 $\pm$ 433.01	198.86 $\pm$ 433.16	1.00	-0.13	-1.82 to 2.083	0.000	Small
LF Power (ms ²)	3.05 $\pm$ 9.28	3.14 $\pm$ 9.26	1.00	0.10	-0.50 to 0.307	0.011	Small
HF Power (ms ²)	0.92 $\pm$ 2.00	1.13 $\pm$ 2.23	1.00	0.21	-0.78 to 0.359	0.099	Small
nuLF Power	54.00 $\pm$ 20.51	49.31 $\pm$ 17.37	0.89	-4.70	-13.72 to 23.111	0.247	Moderate
nuHF Power	45.63 $\pm$ 20.41	50.35 $\pm$ 17.25	0.89	4.72	-23.01 to 13.571	0.250	Moderate
LF:HF Ratio	1.77 $\pm$ 1.51	1.31 $\pm$ 1.09	0.88	-0.47	-0.99 to 1.923	0.355	Moderate
SD1	2.39 $\pm$ 0.80	2.63 $\pm$ 0.80	0.84	0.24	-1.12 to 0.634	0.301	Moderate
SD2	28.80 $\pm$ 28.14	28.88 $\pm$ 28.10	1.00	0.07	-0.29 to 0.144	0.003	Small
Sample Entropy	0.62 $\pm$ 0.38	0.67 $\pm$ 0.45	0.93	0.06	-0.39 to 0.277	0.134	Small

LINEAR						Magnitude of the Bias	
	ECG	Polar	Correlation	% Bias	LoA	Effect Size	Interpretation
Mean RR (ms)	352.3 $\pm$ 43.9	352.3 $\pm$ 43.9	1.00	-0.04	0.00 to 0.074	0.001	Small
SDNN (ms)	20.51 $\pm$ 19.90	20.57 $\pm$ 19.87	1.00	0.06	-0.25 to 0.131	0.003	Small
RMSSD (ms)	3.38 $\pm$ 1.13	3.81 $\pm$ 1.12	0.84	0.43	-1.69 to 0.822	0.384	Moderate
PNN50 (%)	0.00 $\pm$ 0.00	0.00 $\pm$ 0.00	-	0.00	-	0.000	Small
VLF Power (ms ²)	198.99 $\pm$ 433.01	199.05 $\pm$ 433.26	1.00	0.05	-0.82 to 0.707	0.000	Small
LF Power (ms ²)	3.05 $\pm$ 9.28	3.01 $\pm$ 9.23	1.00	-0.04	-0.14 to 0.217	0.004	Small
HF Power (ms ²)	0.92 $\pm$ 2.00	1.00 $\pm$ 2.25	1.00	0.09	-0.58 to 0.410	0.040	Small
nuLF Power	54.00 $\pm$ 20.51	51.29 $\pm$ 19.79	0.98	-2.71	-5.89 to 11.306	0.134	Small
nuHF Power	45.63 $\pm$ 20.41	48.31 $\pm$ 19.71	0.98	2.68	-11.01 to 5.658	0.134	Small
LF:HF Ratio	1.77 $\pm$ 1.51	1.51 $\pm$ 1.25	0.97	-0.26	-0.57 to 1.088	0.188	Small
SD1	2.39 $\pm$ 0.80	2.70 $\pm$ 0.79	0.84	0.31	-1.19 to 0.582	0.382	Moderate
SD2	28.80 $\pm$ 28.14	28.84 $\pm$ 28.12	1.00	0.04	-0.16 to 0.087	0.001	Small
Sample Entropy	0.62 $\pm$ 0.38	0.71 $\pm$ 0.45	0.94	0.09	-0.40 to 0.217	0.225	Moderate

SPLINE						Magnitude of the Bias	
	ECG	Polar	Correlation	% Bias	LoA	Effect Size	Interpretation
Mean RR (ms)	352.3 ± 43.9	351.7 ± 44.3	1.00	-0.66	-4.50 to 5.812	0.015	Small
SDNN (ms)	20.51 ± 19.90	20.35 ± 19.95	1.00	-0.15	-1.67 to 1.976	0.008	Small
RMSSD (ms)	3.38 ± 1.13	3.87 ± 1.09	0.79	0.49	-1.91 to 0.925	0.446	Moderate
PNN50 (%)	0.00 ± 0.00	0.00 ± 0.00	-	0.00	-	0.000	Small
VLF Power (ms ²)	198.99 ± 433.01	197.99 ± 2445.72	1.00	-1.01	-7.91 to 9.926	0.001	Small
LF Power (ms ²)	3.05 ± 9.28	3.03 ± 9.23	1.00	-0.02	-0.18 to 0.215	0.002	Small
HF Power (ms ²)	0.92 ± 2.00	1.03 ± 2.26	1.00	0.11	-0.62 to 0.404	0.051	Small
nuLF Power	54.00 ± 20.51	51.87 ± 18.58	0.96	-2.13	-8.68 to 12.952	0.109	Small
nuHF Power	45.63 ± 20.41	47.68 ± 18.48	0.97	2.05	-12.77 to 8.668	0.105	Small
LF:HF Ratio	1.77 ± 1.51	1.49 ± 1.17	0.97	-0.29	-0.60 to 1.176	0.212	Moderate
SD1	2.39 ± 0.80	2.74 ± 0.77	0.79	0.35	-1.35 to 0.654	0.442	Moderate
SD2	28.80 ± 28.14	28.53 ± 28.24	1.00	-0.27	-2.35 to 2.900	0.010	Small
Sample Entropy	0.62 ± 0.38	0.74 ± 0.45	0.91	0.13	-0.49 to 0.241	0.304	Moderate

CUBIC						Magnitude of the Bias	
	ECG	Polar	Correlation	% Bias	LoA	Effect Size	Interpretation
Mean RR (ms)	352.3 ± 43.9	352.3 ± 43.9	1.00	-0.04	-0.05 to 0.136	0.001	Small
SDNN (ms)	20.51 ± 19.90	20.59 ± 19.86	0.76	0.08	-0.36 to 0.196	0.004	Small
RMSSD (ms)	3.38 ± 1.13	3.88 ± 1.20	0.00	0.50	-2.10 to 1.093	0.431	Moderate
PNN50 (%)	0.00 ± 0.00	0.01 ± 0.04	-	0.01	-	0.333	Moderate
VLF Power (ms ²)	198.99 ± 433.01	199.03 ± 433.27	1.00	0.04	-0.08 to 0.061	0.000	Small
LF Power (ms ²)	3.05 ± 9.28	3.01 ± 9.23	1.00	-0.03	-0.83 to 0.759	0.004	Small
HF Power (ms ²)	0.92 ± 2.00	1.01 ± 2.25	1.00	0.09	-0.11 to 0.178	0.045	Small
nuLF Power	54.00 ± 20.51	51.06 ± 19.69	0.98	-2.94	-0.59 to 0.405	0.146	Small
nuHF Power	45.63 ± 20.41	48.53 ± 19.62	0.98	2.89	-5.02 to 10.903	0.145	Small
LF:HF Ratio	1.77 ± 1.51	1.49 ± 1.22	0.97	-0.29	-10.60 to 4.809	0.208	Moderate
SD1	2.39 ± 0.80	2.75 ± 0.86	0.76	0.36	-0.54 to 1.108	0.428	Moderate
SD2	28.80 ± 28.14	28.85 ± 28.12	1.00	0.04	-1.48 to 0.773	0.002	Small
Sample Entropy	0.62 ± 0.38	0.71 ± 0.45	0.94	0.10	-0.17 to 0.086	0.234	Moderate

KUBIOS						Magnitude of the Bias	
	ECG	Polar	Correlation	% Bias	LoA	Effect Size	Interpretation
Mean RR (ms)	352.3 ± 43.9	352.4 ± 44.1	1.00	0.09	-1.19 to 1.020	0.002	Small
SDNN (ms)	20.51 ± 19.90	20.73 ± 19.64	1.00	0.22	-1.57 to 1.123	0.011	Small
RMSSD (ms)	3.38 ± 1.13	4.08 ± 1.23	0.76	0.70	-2.30 to 0.895	0.595	Mod - Great
PNN50 (%)	0.00 ± 0.00	0.03 ± 0.10	0.00	0.03	-0.22 to 0.158	0.482	Moderate
VLF Power (ms ²)	198.99 ± 433.01	198.01 ± 431.96	1.00	-0.98	-6.13 to 8.089	0.002	Small
LF Power (ms ²)	3.05 ± 9.28	3.60 ± 9.26	0.99	0.56	-3.04 to 1.932	0.060	Small
HF Power (ms ²)	0.92 ± 2.00	2.21 ± 3.88	0.51	1.30	-7.81 to 5.222	0.420	Moderate
nuLF Power	54.00 ± 20.51	46.28 ± 16.03	0.84	-7.73	-14.17 to 29.621	0.420	Moderate
nuHF Power	45.63 ± 20.41	53.41 ± 15.95	0.84	7.78	-29.71 to 14.145	0.425	Moderate
LF:HF Ratio	1.77 ± 1.51	1.11 ± 0.93	0.78	-0.66	-1.25 to 2.576	0.528	Mod - Great
SD1	2.39 ± 0.80	2.89 ± 0.87	0.77	0.50	-1.62 to 0.632	0.591	Mod - Great
SD2	28.80 ± 28.14	29.06 ± 27.81	1.00	0.25	-2.14 to 1.631	0.009	Small
Sample Entropy	0.62 ± 0.38	0.72 ± 0.44	0.90	0.11	-0.49 to 0.276	0.258	Moderate

Recovery: Heart rate variability parameters obtained from the ECG and Polar V800 HRM (mean $\pm$ SD), % bias and limits of agreement (LoA), intra-class correlation coefficients (ICC) and 95 % confidence intervals and effect sizes.

UNCORRECTED						Magnitude of the Bias	
	ECG	Polar	Correlation	% Bias	LoA	Effect Size	Interpretation
Mean RR (ms)	401.7 $\pm$ 56.8	416.9 $\pm$ 58.0	0.97	15.26	-40.82 to 10.29	0.266	Moderate
SDNN (ms)	53.99 $\pm$ 35.98	98.95 $\pm$ 45.23	0.73	44.95	-106.02 to 16.12	1.100	Great
RMSSD (ms)	5.63 $\pm$ 7.23	104.59 $\pm$ 60.90	-0.30	98.96	-223.36 to 25.44	2.282	Great
PNN50 (%)	0.49 $\pm$ 1.88	6.64 $\pm$ 5.31	0.03	6.16	-17.09 to 4.78	1.545	Great
VLF Power (ms ²)	1527.04 $\pm$ 3266.96	2887.53 $\pm$ 3315.79	0.92	1360.49	-3985.93 to 1264.95	0.413	Moderate
LF Power (ms ²)	183.02 $\pm$ 674.93	3074.83 $\pm$ 3545.43	-0.02	2891.81	-9994.87 to 4211.26	1.133	Great
HF Power (ms ²)	53.34 $\pm$ 200.51	4509.51 $\pm$ 4177.61	-0.25	4456.17	-12749.59 to 3837.24	1.507	Great
nuLF Power	80.47 $\pm$ 11.42	44.67 $\pm$ 19.80	0.03	-35.80	-8.42 to 80.02	2.215	Great
nuHF Power	19.44 $\pm$ 11.35	54.96 $\pm$ 19.64	0.03	35.52	-79.39 to 8.36	2.214	Great
LF:HF Ratio	5.86 $\pm$ 3.91	1.66 $\pm$ 3.03	0.60	-4.20	-2.06 to 10.46	1.201	Great
SD1	4.00 $\pm$ 5.12	74.05 $\pm$ 43.11	-0.30	70.05	-158.11 to 18.01	2.282	Great
SD2	76.11 $\pm$ 50.62	115.02 $\pm$ 56.26	0.87	38.91	-93.55 to 15.73	0.727	Great
Sample Entropy	0.18 $\pm$ 0.17	0.19 $\pm$ 0.17	0.93	0.01	-0.14 to 0.12	0.041	Small

DELETION						Magnitude of the Bias	
	ECG	Polar	Correlation	% Bias	LoA	Effect Size	Interpretation
Mean RR (ms)	401.7 $\pm$ 56.8	402.0 $\pm$ 56.5	1.00	0.28	-4.63 to 4.07	0.005	Small
SDNN (ms)	53.99 $\pm$ 35.98	54.03 $\pm$ 35.99	1.00	0.04	-2.01 to 1.93	0.001	Small
RMSSD (ms)	5.63 $\pm$ 7.23	6.11 $\pm$ 7.07	1.00	0.48	-1.79 to 0.82	0.067	Small
PNN50 (%)	0.49 $\pm$ 1.88	0.49 $\pm$ 1.88	-	0.00	-	0.000	Small
VLF Power (ms ²)	1527.04 $\pm$ 3266.96	1549.80 $\pm$ 3267.83	1.00	22.75	-176.35 to 130.85	0.007	Small
LF Power (ms ²)	183.02 $\pm$ 674.93	185.25 $\pm$ 674.54	1.00	2.23	-15.75 to 11.29	0.003	Small
HF Power (ms ²)	53.34 $\pm$ 200.51	53.73 $\pm$ 199.83	1.00	0.39	-2.60 to 1.81	0.002	Small
nuLF Power	80.47 $\pm$ 11.42	77.85 $\pm$ 9.49	0.77	-2.62	-11.68 to 16.93	0.250	Moderate
nuHF Power	19.44 $\pm$ 11.35	21.97 $\pm$ 9.30	0.78	2.53	-16.39 to 11.33	0.244	Moderate
LF:HF Ratio	5.86 $\pm$ 3.91	4.61 $\pm$ 3.10	0.93	-1.25	-1.74 to 4.24	0.355	Moderate
SD1	4.00 $\pm$ 5.12	4.34 $\pm$ 5.01	1.00	0.34	-1.26 to 0.58	0.068	Small
SD2	76.11 $\pm$ 50.62	76.14 $\pm$ 50.65	1.00	0.04	-2.83 to 2.76	0.001	Small
Sample Entropy	0.18 $\pm$ 0.17	0.22 $\pm$ 0.18	0.90	0.04	-0.19 to 0.11	0.220	Moderate

MEAN						Magnitude of the Bias	
	ECG	Polar	Correlation	% Bias	LoA	Effect Size	Interpretation
Mean RR (ms)	401.7 $\pm$ 56.8	401.6 $\pm$ 56.8	1.00	-0.03	-0.20 to 0.262	0.001	Small
SDNN (ms)	53.99 $\pm$ 35.98	54.05 $\pm$ 35.96	1.00	0.05	-0.31 to 0.207	0.001	Small
RMSSD (ms)	5.63 $\pm$ 7.23	5.89 $\pm$ 7.11	1.00	0.26	-1.53 to 1.002	0.037	Small
PNN50 (%)	0.49 $\pm$ 1.88	0.49 $\pm$ 1.88	-	0.00	-	0.000	Small
VLF Power (ms ²)	1527.04 $\pm$ 3266.96	1527.93 $\pm$ 3265.21	1.00	0.88	-8.06 to 6.293	0.000	Small
LF Power (ms ²)	183.02 $\pm$ 674.93	183.05 $\pm$ 675.00	1.00	0.03	-0.65 to 0.597	0.000	Small
HF Power (ms ²)	53.34 $\pm$ 200.51	53.43 $\pm$ 199.91	1.00	0.09	-1.63 to 1.441	0.000	Small
nuLF Power	80.47 $\pm$ 11.42	77.05 $\pm$ 10.46	0.76	-3.42	-11.70 to 18.528	0.312	Moderate
nuHF Power	19.44 $\pm$ 11.35	22.79 $\pm$ 10.29	0.76	3.35	-18.07 to 11.363	0.309	Moderate
LF:HF Ratio	5.86 $\pm$ 3.91	4.51 $\pm$ 3.02	0.92	-1.35	-1.86 to 4.556	0.386	Moderate
SD1	4.00 $\pm$ 5.12	4.19 $\pm$ 5.04	1.00	0.19	-1.08 to 0.708	0.037	Small
SD2	76.11 $\pm$ 50.62	76.18 $\pm$ 50.60	1.00	0.07	-0.42 to 0.279	0.001	Small
Sample Entropy	0.18 $\pm$ 0.17	0.21 $\pm$ 0.18	0.90	0.03	-0.18 to 0.126	0.166	Small

LINEAR						Magnitude of the Bias	
	ECG	Polar	Correlation	% Bias	LoA	Effect Size	Interpretation
Mean RR (ms)	401.7 $\pm$ 56.8	401.7 $\pm$ 56.8	1.00	-0.03	0.00 to 0.058	0.001	Small
SDNN (ms)	53.99 $\pm$ 35.98	54.00 $\pm$ 35.97	1.00	0.01	-0.08 to 0.063	0.000	Small
RMSSD (ms)	5.63 $\pm$ 7.23	5.97 $\pm$ 7.09	1.00	0.34	-1.65 to 0.961	0.048	Small
PNN50 (%)	0.49 $\pm$ 1.88	0.49 $\pm$ 1.88	-	0.00	-	0.000	Small
VLF Power (ms ²)	1527.04 $\pm$ 3266.96	1526.74 $\pm$ 3265.62	1.00	-0.30	-2.43 to 3.034	0.000	Small
LF Power (ms ²)	183.02 $\pm$ 674.93	183.03 $\pm$ 675.01	1.00	0.01	-0.23 to 0.202	0.000	Small
HF Power (ms ²)	53.34 $\pm$ 200.51	53.28 $\pm$ 199.95	1.00	-0.06	-1.19 to 1.303	0.000	Small
nuLF Power	80.47 $\pm$ 11.42	79.05 $\pm$ 9.82	0.81	-1.42	-11.79 to 14.635	0.134	Small
nuHF Power	19.44 $\pm$ 11.35	20.81 $\pm$ 9.64	0.82	1.37	-14.15 to 11.408	0.130	Small
LF:HF Ratio	5.86 $\pm$ 3.91	5.02 $\pm$ 3.24	0.95	-0.84	-1.76 to 3.435	0.234	Moderate
SD1	4.00 $\pm$ 5.12	4.24 $\pm$ 5.03	1.00	0.24	-1.16 to 0.679	0.048	Small
SD2	76.11 $\pm$ 50.62	76.11 $\pm$ 50.61	1.00	0.01	-0.08 to 0.063	0.000	Small
Sample Entropy	0.18 $\pm$ 0.17	0.22 $\pm$ 0.18	0.89	0.03	-0.20 to 0.128	0.190	Small

SPLINE							Magnitude of the Bias	
	ECG	Polar	Correlation	% Bias	LoA		Effect Size	Interpretation
Mean RR (ms)	401.7 ± 56.8	401.7 ± 56.8	1.00	-0.03	0.00 to 0.058		0.001	Small
SDNN (ms)	53.99 ± 35.98	54.01 ± 35.97	1.00	0.01	-0.09 to 0.062		0.000	Small
RMSSD (ms)	5.63 ± 7.23	5.97 ± 7.10	1.00	0.34	-1.64 to 0.972		0.047	Small
PNN50 (%)	0.49 ± 1.88	0.49 ± 1.88	-	0.00	-		0.000	Small
VLF Power (ms ²)	1527.04 ± 3266.96	1526.75 ± 3315.79	1.00	-0.30	-2.44 to 3.032		0.000	Small
LF Power (ms ²)	183.02 ± 674.93	183.05 ± 675.00	1.00	0.03	-0.22 to 0.156		0.000	Small
HF Power (ms ²)	53.34 ± 200.51	53.28 ± 199.95	1.00	-0.05	-1.20 to 1.300		0.000	Small
nuLF Power	80.47 ± 11.42	78.97 ± 9.88	0.81	-1.50	-11.79 to 14.789		0.140	Small
nuHF Power	19.44 ± 11.35	20.88 ± 9.70	0.82	1.44	-14.30 to 11.422		0.136	Small
LF:HF Ratio	5.86 ± 3.91	5.01 ± 3.25	0.95	-0.85	-1.79 to 3.482		0.235	Moderate
SD1	4.00 ± 5.12	4.24 ± 5.03	1.00	0.24	-1.16 to 0.687		0.047	Small
SD2	76.11 ± 50.62	76.12 ± 50.61	1.00	0.01	-0.08 to 0.062		0.000	Small
Sample Entropy	0.18 ± 0.17	0.22 ± 0.18	0.89	0.04	-0.20 to 0.130		0.206	Moderate

CUBIC							Magnitude of the Bias	
	ECG	Polar	Correlation	% Bias	LoA		Effect Size	Interpretation
Mean RR (ms)	401.7 ± 56.8	401.7 ± 56.8	1.00	-0.03	0.00 to 0.058		0.001	Small
SDNN (ms)	53.99 ± 35.98	54.00 ± 35.97	1.00	0.01	-0.08 to 0.063		0.000	Small
RMSSD (ms)	5.63 ± 7.23	5.95 ± 7.10	1.00	0.32	-1.63 to 0.979		0.045	Small
PNN50 (%)	0.49 ± 1.88	0.49 ± 1.88	-	0.00	-		0.000	Small
VLF Power (ms ²)	1527.04 ± 3266.96	1526.75 ± 3265.62	1.00	-0.30	-2.44 to 3.034		0.000	Small
LF Power (ms ²)	183.02 ± 674.93	183.05 ± 675.00	1.00	0.03	-0.22 to 0.166		0.000	Small
HF Power (ms ²)	53.34 ± 200.51	53.28 ± 199.95	1.00	-0.05	-1.19 to 1.301		0.000	Small
nuLF Power	80.47 ± 11.42	78.98 ± 9.87	0.81	-1.49	-11.77 to 14.737		0.139	Small
nuHF Power	19.44 ± 11.35	20.87 ± 9.69	0.82	1.43	-14.25 to 11.393		0.135	Small
LF:HF Ratio	5.86 ± 3.91	5.01 ± 3.25	0.95	-0.84	-1.77 to 3.458		0.235	Moderate
SD1	4.00 ± 5.12	4.23 ± 5.03	1.00	0.23	-1.15 to 0.692		0.045	Small
SD2	76.11 ± 50.62	76.11 ± 50.61	1.00	0.01	-0.08 to 0.063		0.000	Small
Sample Entropy	0.18 ± 0.17	0.22 ± 0.18	0.89	0.03	-0.20 to 0.129		0.195	Small

KUBIOS							Magnitude of the Bias	
	ECG	Polar	Correlation	% Bias	LoA		Effect Size	Interpretation
Mean RR (ms)	401.7 ± 56.8	401.8 ± 56.7	1.00	0.15	-2.31 to 2.005		0.003	Small
SDNN (ms)	53.99 ± 35.98	54.03 ± 35.98	1.00	0.03	-1.16 to 1.092		0.001	Small
RMSSD (ms)	5.63 ± 7.23	6.07 ± 7.11	1.00	0.44	-1.81 to 0.940		0.061	Small
PNN50 (%)	0.49 ± 1.88	0.50 ± 1.88	1.00	0.02	-0.16 to 0.122		0.010	Small
VLF Power (ms ²)	1527.04 ± 3266.96	1527.75 ± 3265.46	1.00	0.71	-13.18 to 11.762		0.000	Small
LF Power (ms ²)	183.02 ± 674.93	183.31 ± 674.93	1.00	0.29	-1.50 to 0.925		0.000	Small
HF Power (ms ²)	53.34 ± 200.51	53.75 ± 199.83	1.00	0.42	-2.44 to 1.601		0.002	Small
nuLF Power	80.47 ± 11.42	74.22 ± 11.67	0.64	-6.25	-13.09 to 25.594		0.541	Mod - Great
nuHF Power	19.44 ± 11.35	25.59 ± 11.49	0.64	6.15	-25.11 to 12.804		0.539	Mod - Great
LF:HF Ratio	5.86 ± 3.91	3.98 ± 2.93	0.88	-1.88	-1.92 to 5.683		0.545	Mod - Great
SD1	4.00 ± 5.12	4.31 ± 5.04	1.00	0.31	-1.28 to 0.662		0.061	Small
SD2	76.11 ± 50.62	76.14 ± 50.62	1.00	0.04	-1.63 to 1.552		0.001	Small
Sample Entropy	0.18 ± 0.17	0.22 ± 0.18	0.90	0.04	-0.20 to 0.118		0.225	Moderate