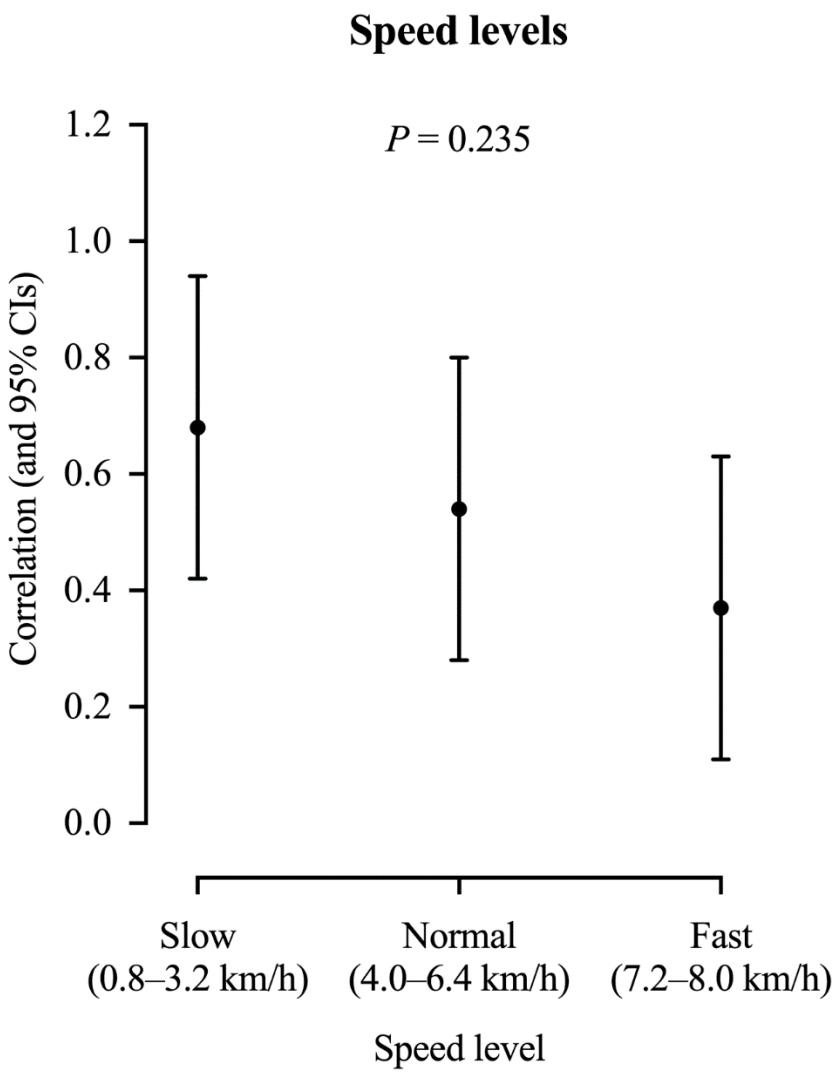
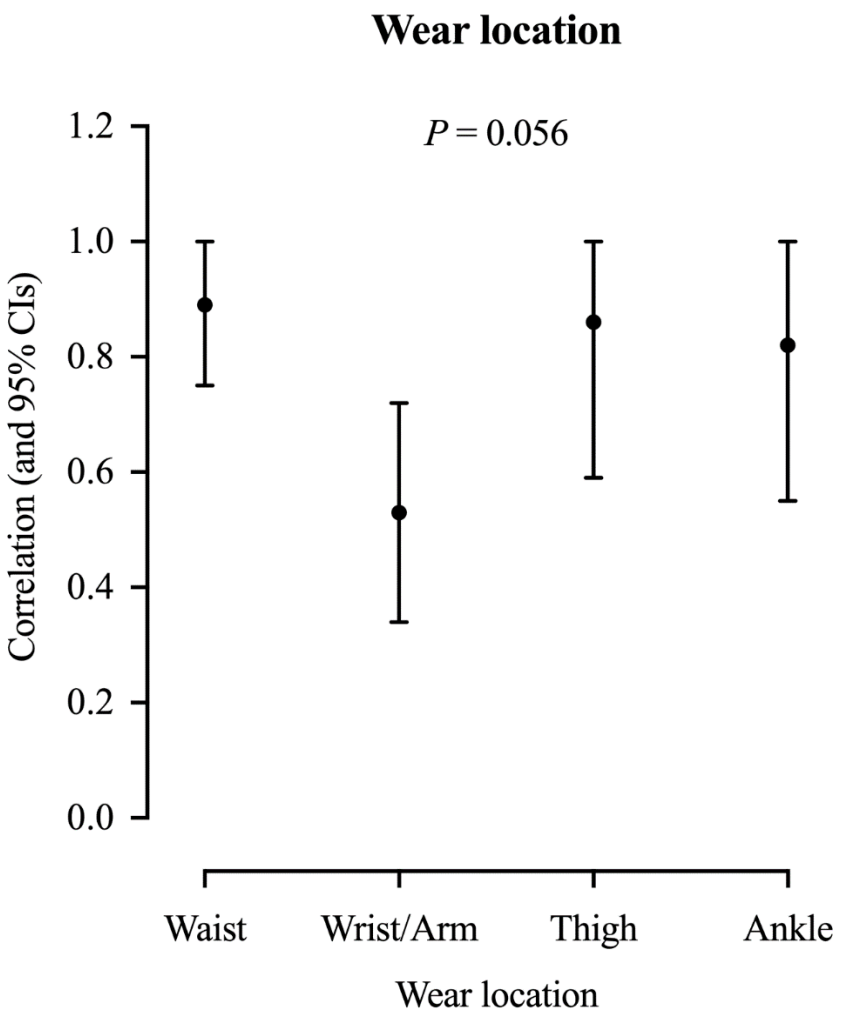
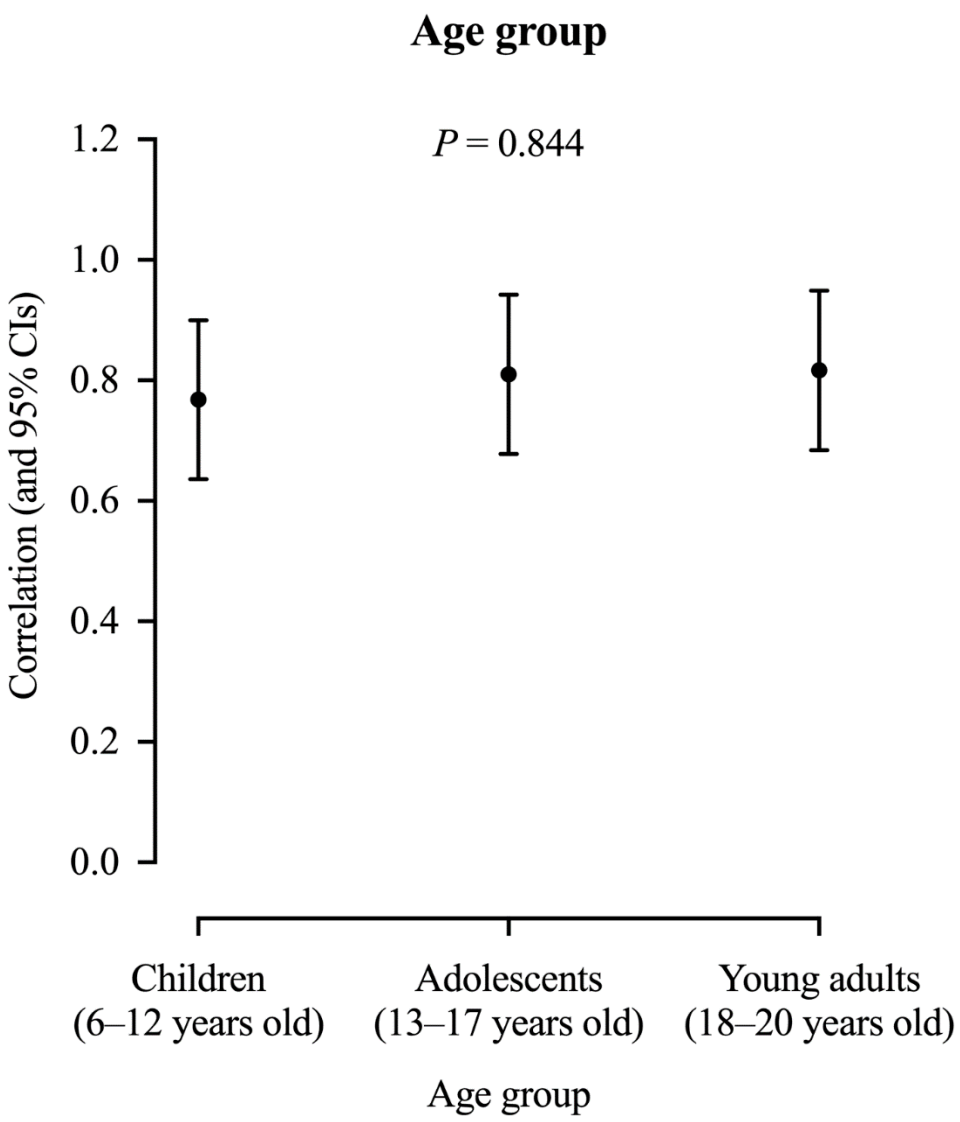


Supplementary Figure 1, Additional File 8. Effect of speed on overall precision of wearable technologies' step counting ability. Each point represents correlation coefficients averaged across wearable technologies and each speed range (i.e., slow, normal or fast), with corresponding 95% confidence intervals (CIs) extending above and below that point estimate. Correlation coefficients closer to 1.0 indicate tighter relationship (more precise) to directly-observed steps, i.e., increased precision. 95% CIs that do not overlap indicate significant differences, while those that do overlap indicate no significant differences.



Supplementary Figure 2, Additional File 8. Effect of wear location on overall precision of wearable technologies' step counting ability. Each point represents correlation coefficients averaged across technologies respective to each wear location for all walking bouts, with corresponding 95% confidence intervals (CIs) extending above and below that point estimate. Correlation coefficients closer to 1.0 indicate greater precision. Where 95% CIs do not overlap, there are significant differences between locations.



Supplementary Figure 3, Additional File 8. Effect of age on overall precision of wearable technologies' step counting ability. Each point represents correlation coefficients averaged across technologies respective to each age group for all walking bouts, with corresponding 95% confidence intervals (CIs) extending above and below that point estimate. Correlation coefficients closer to 1.0 indicate greater precision. Where 95% CIs do not overlap, there are significant differences between locations.