$Figure \ S1-Equations \ used \ to \ calculate \ weight, \ and \ weighted \ means \ and \ standard \ deviations^{[41]}$

For a given kinematic variable with mean values of $\{x_1, x_2, ..., x_n\}$ and sample sizes of $\{n_1, n_2, ..., n_n\}$, weight (w) was calculated via the formula:

$$w_i = \frac{n_i}{n_1 + n_2 + \dots + n_n}$$

For a given kinematic variable with mean values of $\{x_1, x_2, ..., x_n\}$ and weights of $\{w_1, w_2, ..., w_n\}$, weighted mean (\overline{X}_w) was calculated via the formula:

$$\overline{X}_w = \frac{w_1 x_1 + w_2 x_2 + \dots + w_n x_n}{w_1 + w_2 + \dots + w_n}$$

For a given kinematic variable with mean values of $\{x_1, x_2, ..., x_n\}$, sample sizes of $\{n_1, n_2, ..., n_n\}$ and standard deviations of $\{S_1, S_2, ..., S_n\}$, the standard deviation of the weighted mean (SD_w) was calculated via the formula:

$$SD_{w} = \sqrt{\frac{n_{1}\left[S_{1^{2}} + (x_{1} - \overline{X}_{w})^{2}\right] + n_{2}\left[S_{2^{2}} + (x_{2} - \overline{X}_{w})^{2}\right] + \dots + n_{n}\left[S_{n^{2}} + (x_{n} - \overline{X}_{w})^{2}\right]}}{n_{1} + n_{2} + \dots + n_{n}}$$