***Appendix 1****: Formula for estimating the within-athlete standard error (SE).*

|  |  |  |
| --- | --- | --- |
|  | **Group-based test-retest study** | **Individual observations** |
| **Formula** |  |  |
| **Notes** | Where SDΔ is the standard deviation of individual change scores (e.g., test 2 – test 1). | Where is the sum of the squared residuals (difference between actual [*Y*] and predicted [*Y’*] y-values), given as , and *n* is the number of individual observations |
| **Microsoft Excel Formula** | =SDΔ/SQRT(2) | =STEYX(y-values[test performances],x-values [units of time]) |