**Table SDC2a.** Correlations between the relative running speed and pre-trial psychological states during the known incline (KI) time-trial

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Motivation | Total Mood Disturbance | Tension | Depression | Anger | Fatigue | Confusion | Vigor |
| Relative speed at 1000 m | .458\*  [.175, .687] | -.286  [-.551, .052] | .198  [-.286, .538] | -.251  [-.533, .039] | -.096  [-.415, .117] | -.085  [-.436, .275] | .114  [-.425, .476] | .423\*  [.153, .611] |
| Relative speed at 2000 m | .422\*  [.131, .699] | -.278  [-.536, .052] | .131  [-.257, .551] | -.371  [-.634, -.117] | -.150  [-.302, -.049] | -.042  [-.331, .304] | -.011  [-.261, .180] | .360  [.101, .571] |
| Relative speed at 3000 m | -.196  [-.512, .192] | .096  [-.236, .399] | .070  [-.294, .470] | .076  [-.274, .435] | .072  [-.311, .242] | .184  [-.184, .443] | -.037  [-.306, .273] | .015  [-.309, .340] |

\*\*Correlation is significant at the 0.01 level (2-tailed); \*Correlation is significant at the 0.05 level (2-tailed)

Bias corrected and accelerated bootstrap 95% confidence intervals are reported in square brackets. Relative speed = change in speed expressed relative to BL at distance interval

**Analysis:**

Relative running speed at **1000 m** during KI was positively correlated with pre-trial potential motivation, *r* = .458, [.175, .687], *p* = .014

Relative running speed at **1000 m** during KI was positively correlated with pre-trial vigor, *r* = .423, [.153, .611], *p* = .025

Relative running speed at **2000 m** during KI was positively correlated with pre-trial potential motivation, *r* = .422, [.131, .699], *p* = .025

**Table SDC2b.** Correlations between the relative running speed, perceived effort, affective valence and attentional focus frequency ratings at 1000 m during the known incline (KI) time-trial

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 |
| 1. Relative speed | 1 |  |  |  |  |  |
| 2. Perceived effort | .075  [-.279, .442] | 1 |  |  |  |  |
| 3. Affective Valence | -.152  [-.567, .344] | -.572\*\*  [-.784, -.236] | 1 |  |  |  |
| 4. Active Self-Regulation | -.063  [-.451, .316] | .221  [-.214, .672] | -.040  [-.389, .295] | 1 |  |  |
| 5. Internal Sensory Monitoring | .214  [-.203, .516] | .136  [-.210, .595] | -.365  [-.686, .019] | .548\*\*  [.066, .891] | 1 |  |
| 6. Outward Monitoring | .171  [-.170, .496] | .300  [-.162, .686] | -.302  [-.601, .059] | .383\*  [.034, .747] | .609\*\*  [.273, .851] | 1 |

\*\*Correlation is significant at the 0.01 level (2-tailed); \*Correlation is significant at the 0.05 level (2-tailed)

Bias corrected and accelerated bootstrap 95% confidence intervals are reported in square brackets. Relative speed = change in speed expressed relative to BL at distance interval

**Analysis:**

Perceived effort at **1000 m** during KI was inversely correlated with affective valence, *r* = -.572, [-.784, -.236], *p* = .001

Internal sensory monitoring at **1000 m** during KI was positively correlated with active self-regulation, *r* = .548, [.066, .891], *p* = .003

Internal sensory monitoring at **1000 m** during KI was positively correlated with outward monitoring, *r* = .609, [.273, .851], *p* = .001

Outward monitoring at **1000 m** during KI was positively correlated with active self-regulation, *r* = .383, [.034, .747], *p* = .044

**Table SDC2c.** Correlations between the relative running speed, perceived effort, affective valence and attentional focus frequency ratings at 2000 m during the known incline (KI) time-trial

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 |
| 1. Relative speed | 1 |  |  |  |  |  |
| 2. Perceived effort | .382\*  [-.041, .643] | 1 |  |  |  |  |
| 3. Affective Valence | -.389\*  [-.692, .089] | -.743\*\*  [-.900, -.459] | 1 |  |  |  |
| 4. Active Self-Regulation | -.050  [-.417, .276] | .201  [-.162, .515] | -.107  [-.415, .219] | 1 |  |  |
| 5. Internal Sensory Monitoring | .410\*  [.031, .654] | .401\*  [.064, .680] | -.373  [-.607, -.055] | .436\*  [-.144, .901] | 1 |  |
| 6. Outward Monitoring | .316  [-.075, .570] | .376\*  [-.070, .685] | -.321  [-.680, .125] | .175  [-.238, .607] | .582\*\*  [.246, .833] | 1 |

\*\*Correlation is significant at the 0.01 level (2-tailed); \*Correlation is significant at the 0.05 level (2-tailed)

Bias corrected and accelerated bootstrap 95% confidence intervals are reported in square brackets. Relative speed = change in speed expressed relative to BL at distance interval

**Analysis:**

Relative running speed at **2000 m** during KI was positively correlated with perceived effort, *r* = .382, [-.041, .643], *p* = .045

Relative running speed at **2000 m** during KI was negatively correlated with affective valence, *r* = -.389, [-.692, .089], *p* = .041

Relative running speed at **2000 m** during KI was positively correlated with internal sensory monitoring, *r* = .410, [.031, .654], *p* = .030

Perceived effort at **2000 m** during KI was inversely correlated with affective valence, *r* = -.743, [-.900, -.459], *p* < .001

Perceived effort at **2000 m** during KI was positively correlated with internal sensory monitoring, *r* = .401, [.064, .680], *p* = .034

Perceived effort at **2000 m** during KI was positively correlated with outward monitoring, *r* = .376, [-.070, .685], *p* = .048

Internal sensory monitoring at **2000 m** during KI was positively correlated with active self-regulation, *r* = .436, [-.144, .901], *p* = .020

Internal sensory monitoring at **2000 m** during KI was positively correlated with outward monitoring, *r* = .582, [.246, .833], *p* = .001

**Table SDC2d.** Correlations between the relative running speed, perceived effort, affective valence and attentional focus frequency ratings at 3000 m during the known incline (KI) time-trial

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 |
| 1. Relative speed | 1 |  |  |  |  |  |
| 2. Perceived effort | .098  [-.250, .425] | 1 |  |  |  |  |
| 3. Affective Valence | -.149  [-.461, .137] | -.763\*\*  [-.910, -.604] | 1 |  |  |  |
| 4. Active Self-Regulation | -.368  [-.613, -.108] | .224  [-.134, .584] | -.096  [-.407, .194] | 1 |  |  |
| 5. Internal Sensory Monitoring | -.163  [-.516, .258] | .452\*  [.115, .742] | -.405\*  [-.658, -.162] | .247  [-.234, .895] | 1 |  |
| 6. Outward Monitoring | .113  [-.264, .514] | .467\*  [.167, .729] | -.498\*\*  [-.767, -.221] | -.039  [-.385, .384] | .480\*\*  [.143, .764] | 1 |

\*\*Correlation is significant at the 0.01 level (2-tailed); \*Correlation is significant at the 0.05 level (2-tailed)

Bias corrected and accelerated bootstrap 95% confidence intervals are reported in square brackets. Relative speed = change in speed expressed relative to BL at distance interval

**Analysis:**

Perceived effort at **3000 m** during KI was inversely correlated with affective valence, *r* = -.763, [-.910, -.604], *p* < .001

Perceived effort at **3000 m** during KI was positively correlated with internal sensory monitoring, *r* = .452, [.115, .742], *p* = .016

Perceived effort at **3000 m** during KI was positively correlated with outward monitoring, *r* = .467, [.167, .729], *p* = .012

Affective valence at **3000 m** during KI was inversely correlated with internal sensory monitoring, *r* = -.405, [-.658, -.162], *p* = .032

Affective valence at **3000 m** during KI was inversely correlated with outward monitoring, *r* = -.498, [-.767, -.221], *p* = .007

Internal sensory monitoring at **3000 m** during KI was positively correlated with outward monitoring, *r* = .480, [.143, .764], *p* = .010

**Table SDC2e.** Correlations between the relative running speed and pre-trial psychological states during the unknown incline (UI) time-trial

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Potential Motivation | Total Mood Disturbance | Tension | Depression a | Anger a | Vigor | Fatigue | Confusion |
| Relative speed at 1000 m | .150  [-.168, .506] | .154  [-.381, .530] | .060  [-.408, .369] | - | - | -.261  [-.642, .313] | -.053  [-.500, .379] | -.193  [-.586, .310] |
| Relative speed at 2000 m | .069  [-.283, .313] | .216  [-.178, .598] | .059  [-.257, .440] | - | - | -.220  [-.531, .120] | .148  [-.250, .491] | -.265  [-.537, .026] |
| Relative speed at 3000 m | .026  [-.309, .368] | .036  [-.323, .393] | -.218  [-.536, .193] | - | - | -.064  [-.389, .244] | .131  [-.169, .406] | .059  [-.229, .276] |

\*\*Correlation is significant at the 0.01 level (2-tailed); \*Correlation is significant at the 0.05 level (2-tailed)

Bias corrected and accelerated bootstrap 95% confidence intervals are reported in square brackets. Relative speed = change in speed expressed relative to BL at distance interval

a Both pre-trial depression and anger mood state scores were zero for UI time-trial

**Analysis:**

No pre-trial psychological variables were associated with the relative change in running speed at any distance interval during UI

**Table SDC2f.** Correlations between the relative running speed, perceived effort, affective valence and attentional focus frequency ratings at 1000 m during the unknown incline (UI) time-trial

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 |
| 1. Relative speed | 1 |  |  |  |  |  |
| 2. Perceived effort | -.089  [-.393, .247] | 1 |  |  |  |  |
| 3. Affective Valence | -.060  [-.387, .258] | -.559\*\*  [-.813, -.147] | 1 |  |  |  |
| 4. Active Self-Regulation | -.318  [-.581, -.004] | .268  [-.178, .627] | .120  [-.326, .506] | 1 |  |  |
| 5. Internal Sensory Monitoring | -.324  [-.561, -.043] | .329  [.046, .614] | -.261  [-.551, -.021] | .305  [-.134, .756] | 1 |  |
| 6. Outward Monitoring | -.140  [-.473, .234] | .064  [-.379, .456] | -.215  [-.546, .125] | .200  [-.176, .626] | .349  [.032, .645] | 1 |

\*\*Correlation is significant at the 0.01 level (2-tailed); \*Correlation is significant at the 0.05 level (2-tailed)

Bias corrected and accelerated bootstrap 95% confidence intervals are reported in square brackets. Relative speed = change in speed expressed relative to BL at distance interval

**Analysis:**

Perceived effort at **1000 m** during UI was inversely correlated with affective valence, *r* = -.559, [-.813, -.147], *p* = .002

**Table SDC2g.** Correlations between the relative running speed, perceived effort, affective valence and attentional focus frequency ratings at 2000 m during the unknown incline (UI) time-trial

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 |
| 1. Relative speed | 1 |  |  |  |  |  |
| 2. Perceived effort | .127  [-.241, .414] | 1 |  |  |  |  |
| 3. Affective Valence | -.130  [-.536, .378] | -.584\*\*  [-.805, .293] | 1 |  |  |  |
| 4. Active Self-Regulation | -.274  [-.574, .006] | .216  [-.261, .754] | -.080  [-.411, .310] | 1 |  |  |
| 5. Internal Sensory Monitoring | .121  [-.188, .365] | .374\*  [-.260, .837] | -.211  [-.509, .117] | .017  [-.497, .648] | 1 |  |
| 6. Outward Monitoring | .001  [-.333, .314] | .234  [-.281, .648] | -.143  [-.510, .256] | -.055  [-.459, .392] | .701\*\*  [.446, .856] | 1 |

\*\*Correlation is significant at the 0.01 level (2-tailed); \*Correlation is significant at the 0.05 level (2-tailed)

Bias corrected and accelerated bootstrap 95% confidence intervals are reported in square brackets. Relative speed = change in speed expressed relative to BL at distance interval

**Analysis:**

Perceived effort at **2000 m** during UI was inversely correlated with affective valence, *r* = -.584, [-.805, .293], *p* = .001

Perceived effort at **2000 m** during UI was positively correlated with internal sensory monitoring, *r* = .374, [-.260, .837], *p* = .050

Internal sensory monitoring at **2000 m** during UI was positively correlated with outward monitoring, *r* = .701, [.446, .856], *p* < .001

**Table SDC2h.** Correlations between the relative running speed, perceived effort, affective valence and attentional focus frequency ratings at 3000 m during the unknown incline (UI) time-trial

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 |
| 1. Relative speed | 1 |  |  |  |  |  |
| 2. Perceived effort | -.269  [-.468, -.078] | 1 |  |  |  |  |
| 3. Affective Valence | .178  [-.085, .444] | -.744\*\*  [-.882, -.627] | 1 |  |  |  |
| 4. Active Self-Regulation | -.093  [-.398, .278] | .267  [-.129, .622] | -.043  [-.399, .284] | 1 |  |  |
| 5. Internal Sensory Monitoring | -.249  [-.531, .222] | .431\*  [.044, .714] | -.165  [-.452, .101] | .578\*\*  [.108, .842 | 1 |  |
| 6. Outward Monitoring | -.257  [-.561, .061] | .004  [-.356, .492] | -.088  [-.549, .292] | .150  [-.298, .621] | .381\*  [-.167, .713] | 1 |

\*\*Correlation is significant at the 0.01 level (2-tailed); \*Correlation is significant at the 0.05 level (2-tailed)

Bias corrected and accelerated bootstrap 95% confidence intervals are reported in square brackets. Relative speed = change in speed expressed relative to BL at distance interval

**Analysis:**

Perceived effort at **3000 m** during UI was inversely correlated with affective valence, *r* = -.744, [-.882, -.627], *p* < .001

Perceived effort at **3000 m** during UI was positively correlated with internal sensory monitoring, *r* = .431, [.044, .714], *p* = .022

Internal sensory monitoring at **3000 m** during UI was positively correlated with active self-regulation, *r* = .578, [.108, .842], *p* = .001

Internal sensory monitoring at **3000 m** during UI was positively correlated with outward monitoring, *r* = .381, [-.167, .713], *p* = .046