**JPED\_2018-613 – Supplementary Material**

**Supplementary file**

**Table S1 - Parameter estimates for fixed (age) and random effects (children and schools), (±) standard-errors, and p-values.**

|  |  |  |
| --- | --- | --- |
| Parameters |  | p-value |
| *Regression coefficients (fixed effects)* |  |  |
| Intercept  | 68.43 ± 2.68 | < 0.001 |
| Age  | -3.49 ± 0.88 | < 0.001 |
| *Variance components (random effects)* |  |  |
| School | 87.13 ± 43.69 |  |
| Child | 459.27 ± 38.22 |  |
| Deviance | 2,768.03 |  |
| Number of estimated parameters | 4 |  |

**Table S2 - Parameter estimates for fixed (sex) and random effects (children and schools), (±) standard-errors, and p-values.**

|  |  |  |
| --- | --- | --- |
| Parameters |  | p-value |
| *Regression coefficients (fixed effects)* |  |  |
| Intercept  | 57.30 ± 2.90 | < 0.001 |
| Sex (boys)  | 20.41 ± 2.25 | < 0.001 |
| *Variance components (random effects)* |  |  |
| School | 92.12 ± 43.22 |  |
| Child | 376.36 ± 31.35 |  |
| Deviance | 2,708.28 |  |
| Number of estimated parameters | 4 |  |

**Table S3 - Parameter estimates for fixed (age-by-sex interaction) and random effects (children and schools), (±) standard-errors, and p-values.**

|  |  |  |
| --- | --- | --- |
| Parameters |  | p-value |
| *Regression coefficients (fixed effects)* |  |  |
| Intercept  | 59.55 ± 3.02 | < 0.001 |
| Age-by-sex interaction | 2.22 ± 0.29 | < 0.001 |
| *Variance components (random effects)* |  |  |
| School | 105.26 ± 49.58 |  |
| Child | 399.84 ± 33.35 |  |
| Deviance | 2,731.80 |  |
| Number of estimated parameters | 4 |  |

**Table S4 - Parameter estimates for fixed (BMI) and random effects (children and schools), (±) standard-errors, and p-values.**

|  |  |  |
| --- | --- | --- |
| Parameters |  | p-value |
| *Regression coefficients (fixed effects)* |  |  |
| Intercept  | 68.14 ± 2.78 | < 0.001 |
| BMI (kg·m-2) | -1.32 ± 0.43 | 0.002 |
| *Variance components (random effects)* |  |  |
| School | 96.54 ± 48.37 |  |
| Child | 466.42 ± 38.89 |  |
| Deviance | 2,775.23 |  |
| Number of estimated parameters | 4 |  |

**Table S5 - Parameter estimates for fixed (KTK) and random effects (children and schools), (±) standard-errors, and p-values.**

|  |  |  |
| --- | --- | --- |
| Parameters |  | p-value |
| *Regression coefficients (fixed effects)* |  |  |
| Intercept  | 67.54 ± 2.83 | < 0.001 |
| KTK (points) | -0.02 ± 0.03 | 0.399 |
| *Variance components (random effects)* |  |  |
| School | 98.90 ± 50.47 |  |
| Child | 476.89 ± 40.08 |  |
| Deviance | 2,751.30 |  |
| Number of estimated parameters | 4 |  |

**Table S6 - Parameter estimates for fixed (SES) and random effects (children and schools), (±) standard-errors, and p-values.**

|  |  |  |
| --- | --- | --- |
| Parameters |  | p-value |
| *Regression coefficients (fixed effects)* |  |  |
| Intercept  | 70.61 ± 3.77 | < 0.001 |
| SES (Med) | -0.80 ± 3.80 | 0.833 |
| SES (High) | -5.26 ± 3.51 | 0.134 |
| *Variance components (random effects)* |  |  |
| School | 98.90 ± 50.47 |  |
| Child | 476.89 ± 40.08 |  |
| Deviance | 2,751.30 |  |
| Number of estimated parameters | 5 |  |

**Table S7 - Parameter estimates for fixed (wear time) and random effects (children and schools), (±) standard-errors, and p-values.**

|  |  |  |
| --- | --- | --- |
| Parameters |  | p-value |
| *Regression coefficients (fixed effects)* |  |  |
| Intercept  | 44.68 ± 10.13 | < 0.001 |
| Wear time (h∙d-1) | 1.72 ± 0.72 | 0.017 |
| *Variance components (random effects)* |  |  |
| School | 92.34 ± 47.79 |  |
| Child | 473.37 ± 39 |  |
| Deviance | 2,778.00 |  |
| Number of estimated parameters | 4 |  |

**Table S8 - Parameter estimates for fixed (Nº of students) and random effects (children and schools), (±) standard-errors, and p-values.**

|  |  |  |
| --- | --- | --- |
| Parameters |  | p-value |
| *Regression coefficients (fixed effects)* |  |  |
| Intercept  | 68.73 ± 3.55 | < 0.001 |
| No. of students | 0.04 ± 0.13 | 0.726 |
| *Variance components (random effects)* |  |  |
| School | 115.63 ± 57.86 |  |
| Child | 477.90 ± 39.79 |  |
| Deviance | 2,786.96 |  |
| Number of estimated parameters | 4 |  |

**Table S9 - Parameter estimates for fixed (No. of teachers) and random effects (children and schools), (±) standard-errors, and p-values.**

|  |  |  |
| --- | --- | --- |
| Parameters |  | p-value |
| *Regression coefficients (fixed effects)* |  |  |
| Intercept  | 67.76 ± 3.38 | < 0.001 |
| No. of teachers | -0.22 ± 1.17 | 0.846 |
| *Variance components (random effects)* |  |  |
| School | 118.13 ± 58.47 |  |
| Child | 477.64 ± 39.76 |  |
| Deviance | 2,782.64 |  |
| Number of estimated parameters | 4 |  |

**Table S10 - Parameter estimates for fixed (school setting) and random effects (children and schools), (±) standard-errors, and p-values.**

|  |  |  |
| --- | --- | --- |
| Parameters |  | p-value |
| *Regression coefficients (fixed effects)* |  |  |
| Intercept  | 64.37 ± 3.36 | < 0.001 |
| School setting (mixed) | 9.96 ± 5.64 | 0.078 |
| *Variance components (random effects)* |  |  |
| School | 87.88 ± 47.30 |  |
| Child | 478.51 ± 39.83 |  |
| Deviance | 2,776.51 |  |
| Number of estimated parameters | 4 |  |

**Table S11 - Parameter estimates for fixed (existence of policies or/and practices) and random effects (children and schools), (±) standard-errors, and p-values.**

|  |  |  |
| --- | --- | --- |
| Parameters |  | p-value |
| *Regression coefficients (fixed effects)* |  |  |
| Intercept  | 66.04 ± 3.83 | < 0.001 |
| Existence of policies or/and practices for PA (Policies)∞ | 10.67 ± 7.62 | 0.161 |
| Existence of policies or/and practices for PA (Practices) | -0.33 ± 7.00 | 0.963 |
| *Variance components (random effects)* |  |  |
| School | 105.97 ± 55.28 |  |
| Child | 477.89 ± 39.79 |  |
| Deviance | 2,771.07 |  |
| Number of estimated parameters | 5 |  |

**Table S12 - Parameter estimates for fixed (playground dimension) and random effects (children and schools), (±) standard-errors, and p-values.**

|  |  |  |
| --- | --- | --- |
| Parameters |  | p-value |
| *Regression coefficients (fixed effects)* |  |  |
| Intercept  | 91.23 ± 8.98 | < 0.001 |
| Playground dimensions (Medium)¥ | -22.81 ± 11.32 | 0.044 |
| Playground dimensions (Large) | -25.92 ± 9.43 | 0.006 |
| *Variance components (random effects)* |  |  |
| School | 74.24 ± 39.73 |  |
| Child | 476.55 ± 39.56 |  |
| Deviance | 2,776.56 |  |
| Number of estimated parameters | 5 |  |

**Table S13 - Parameter estimates for fixed (multi-sports roofed) and random effects (children and schools), (±) standard-errors, and p-values.**

|  |  |  |
| --- | --- | --- |
| Parameters |  | p-value |
| *Regression coefficients (fixed effects)* |  |  |
| Intercept  | 67.04 ± 3.56 | < 0.001 |
| Multi-sports roofed (≤ 49 m2)# | -2.14 ± 10.44 | 0.837 |
| Multi-sports roofed (≥ 50 m2) | -6.38 ± 7.72 | 0.408 |
| *Variance components (random effects)* |  |  |
| School | 118.85 ± 60.76 |  |
| Child | 477.91 ± 39.78 |  |
| Deviance | 2,771.61 |  |
| Number of estimated parameters | 5 |  |

**Table S14 - Parameter estimates for fixed (material for physical education) and random effects (children and schools), (±) standard-errors, and p-values.**

|  |  |  |
| --- | --- | --- |
| Parameters |  | p-value |
| *Regression coefficients (fixed effects)* |  |  |
| Intercept  | 63.10 ± 2.68 | < 0.001 |
| Material for physical education (no) | 19.36 ± 5.50 | < 0.001 |
| *Variance components (random effects)* |  |  |
| School | 56.60 ± 29.77 |  |
| Child | 473.37 ± 39.10 |  |
| Deviance | 2,768.73 |  |
| Number of estimated parameters | 4 |  |

**Table S15 - Parameter estimates for fixed (infrastructures for physical education) and random effects (children and schools), (±) standard-errors, and p-values.**

|  |  |  |
| --- | --- | --- |
| Parameters |  | p-value |
| *Regression coefficients (fixed effects)* |  |  |
| Intercept  | 68.66 ± 3.46 | < 0.001 |
| Infrastructures for physical education (two) | -2.43 ± 6.95 | 0.727 |
| *Variance components (random effects)* |  |  |
| School | 118.24 ± 58.10 |  |
| Child | 477.48 ± 39.74 |  |
| Deviance | 2,778.99 |  |
| Number of estimated parameters | 4 |  |

**Table S16 - Parameter estimates for fixed (duration of physical education classes) and random effects (children and schools), (±) standard-errors, and p-values.**

|  |  |  |
| --- | --- | --- |
| Parameters |  | p-value |
| *Regression coefficients (fixed effects)* |  |  |
| Intercept  | 81.20 ± 5.13 | < 0.001 |
| Duration of physical education classes (60 min) | -17.34 ± 5.83 | 0.003 |
| *Variance components (random effects)* |  |  |
| School | 64.04 ± 34.40 |  |
| Child | 476.17 ± 39.44 |  |
| Deviance | 2,771.58 |  |
| Number of estimated parameters | 4 |  |