**JPED-D-20-00312 – Supplementary Material**

**Appendix 1 - Synthesis of Intervention Effects (n = 10).**

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| **Positive** | **Null** | **Negative** |
| **Light Physical Activity (n = 2)** |
| **Yildirim et al.[24]**Recess (PA-I): OR: 1.18 (1.07 to 1.31) p = 0.001 | **Kelly et al.[34]** Intervention on playground markings**Yildirim et al.[24]**Recess: Intervention (PA+SB-I; SB-I); Perceived accessibility of sports equipment; Perceived school environment; Boys; Girls.Lunchtime: Intervention (PA-I; PA+SB-I; SB-I); Teachers social support; Perceived accessibility of sports equipment; Perceived of the school environment; Boys; Girls. | **Yildirim et al.[24]**Recess:Teachers social support: OR: 0.98 (0.96 to 0.99) p = 0.049Perceived marked lines: OR: 0.95 (0.90 to 0.99) p = 0.033Lunchtime:Perceived marked lines: OR: 0.95 (0.91 to 0.98) p = 0.006 |
| **Moderate Physical Activity (n = 1)** |
| **Huberty et al.[23]**Intervention: β: 2.5 p < 0.01Type of school: β: 1.2 p = 0.004 | **Huberty et al.[23]**Race.**Beyler et al.[31]**Intervention (time during recess). | **Huberty et al.[23]**Age: β: -0.6 p = 0.004Gender (female): β: -1.6 p < 0.001 |
|  | **Vigorous Physical Activity (n = 5)** |  |
| **Huberty et al.[23]**Intervention: β: 2.2 p < 0.01**Ridgers et al.[35]**Morning recess assessed by HRBaseline PA: β: 0.2 (0.1) 0.1 to 0.3 p ≤ 0.001Recess duration: β: 0.5 (0.2) 0.1 to 0.8 p ≤ 0.001Morning recess assessed by AccBaseline PA: β: 0.3 (0.1) 0.2 to 0.4 p ≤ 0.001Lunchtime assessed by HRBaseline PA: β: 0.2 (0.1) 0.1 to 0.2 p ≤ 0.001Lunchtime assessed by AccBaseline PA: β: 0.2 (0.1) 0.1 to 0.3 p ≤ 0.001Intervention: β: 1.4 (0.7) 0.1 to 2.7 p ≤ 0.05 **Ridgers et al.[36]**Baseline VPA: β: 0.35 (0.07) 0.21 to 0.49 p ≤ 0.001**Ridgers et al.[37]**Assessed by HR:Intervention: β: 2.43 (6.06 to 4.80) p = 0.045Assessed by ACC:Intervention: β: 2.32 (0.71 to 3.93) p = 0.005**Siahpush et al.[38]**Intervention: β: 4.7 p < 0.01 | **Huberty et al.[23]**Age; Race; BMI; School; Recess duration.**Elder et al.[32]**Intervention (time; time x gender; equipped x male).**Ridgers et al.[35]** Morning Recess assessed by HR:Intervention; Gender; BMI.Morning Recess assessed by Acc:Intervention; Age; BMI.Lunchtime Recess assessed by HR:Intervention; BMI; Recess duration.Lunchtime Recess assessed by Acc:Time; Age; Recess duration.**Ridgers et al.[36]** Intervention; Age; BMI; Recess duration; Intervention x baseline; Intervention x Gender; Intervention x age; Intervention x BMI; Intervention x Recess duration.**Beyler et al.[31]**Intervention (time during recess). | **Huberty et al.[23]**Gender (female): β: -1.3 p < 0.001**Elder et al.[32]**Intervention/time/area:Organized recess: β: -0.22 p < 0.01Organized recess (female): β: -0.21 p < 0.01Organized recess (male): β: -0.21 p < 0.01Equipped recess (female): β: -0.10 p = 0.04**Ridgers et al.[35]**Morning recess assessed by HR:Program duration: β: -2.5 (1.2) 0.2 to 4.8 p ≤ 0.05Age: β: -1.8 (1.3) -2.8 to -0.9 p ≤ 0.001Morning recess assessed by Acc:Program duration: β: -1.6 (0.8) 3.1 to 0.1 p ≤ 0.05Gender (female): β: -2.3 -3.9 to -0.7 p ≤ 0.001Recess duration: β: -0.2 (0.1) -0.4 to -0.1 p ≤ 0.001Lunchtime recess assessed by HR:Program duration: β: -3.0 (0.9) -4.8 to -1.2 p ≤ 0.001Gender (female): β: -4.2 (1.0) -6.3 to -2.1 p ≤ 0.001Age: β: -1.5 (0.4) -2.3 to -0.7 p ≤ 0.001Lunchtime recess assessed by Acc:Gender (female): β: -2.8 (0.6) -4.0 to -1.6 p ≤ 0.001BMI (overweight): β: -1.5 (0.7) -2.8 to -0.2 p ≤ 0.05**Ridgers et al.[36]**Gender (female): β: -3.05 (0.66) -4.34 to -1.76 p ≤ 0.001 |
| **Moderate and Vigorous Physical Activity (n = 5)** |
| **Ridgers et al.[35]**Morning recess assessed by HRBaseline PA: β: 0.2 (0.1) 0.1 to 0.3 p ≤ 0.001Morning recess assessed by AccBaseline PA: β: 0.1 (0.1) 0.0 to -0.3 p ≤ 0.05Lunch recess assessed by HRBaseline PA: β: 0.2 (0.01) 0.1 to 0.3 p ≤ 0.001Lunch recess assessed by AccBaseline PA: β: 0.2 (0.1) 0.1 to 0.3 p ≤ 0.001**Ridgers et al.[36]**Baseline MVPA: β: 0.37 (0.07) 0.24 to 0.49 p < 0,01**Ridgers et al.[37]**Assessed by HR:Intervention: β: 4.03 (0.15 to 7.91) p = 0.042Assessed by Acc:Intervention: β: 4.53 (0.59 to 8.47) p = 0.025**Yildirim et al.[24]**Recess (PA-I): OR: 1.40 (1.20 to 1.62) p = 0.000Recess (SB-I): OR: 1.38 (1.21 to 1.57) p = 0.000 Recess Perceived school environment: OR: 1.06 (1.01 to 1.12) p = 0.031 Gender (girls): OR: 1.13 (1.07 to 1.19) p = 0.000 | **Beyler et al.[31]**Intervention (time during recess).**Farmer et al.[33]**Intervention (Recess; Lunchtime).**Elder et al.[32]**Intervention (time; time x gender).**Kelly et al.[34]**Intervention (playground markings).**Ridgers et al.[35]** Recess assessed by Heart rate:Intervention; Time; Gender; BMI; Recess duration.Recess assessed by Acc:Intervention; Time; Age; BMI; Recess duration.Lunchtime assessed by HR:Intervention; BMI; Recess duration.Lunchtime assessed by Acc:Intervention; Time; BMI; Recess duration.**Ridgers et al.[36]**Intervention; Age, Recess duration; Intervention x baseline MVPA; Intervention x Gender; Intervention x BMI; Intervention x Recess duration.**Siahpush et al.[38]**Gender; Race.**Yildirim et al.[24]**Recess: Intervention (PA+SB-I); Teachers social support; perceived availability of line marks; perceived accessibility of sports equipment; Boys.Lunchtime: Intervention (PA-I; PA+SB-I; SB-I); Teachers social support; Perceived availability of line marks; Perceived accessibility of sports equipment; Perceived of the school environment; Boys; Girls. | **Elder et al.[32]**Intervention:Organized recess: β: -0.17 p < 0.01Organized recess (female): β: -0.17 p < 0.01Organized recess (male): β: -0.18 p < 0.01**Ridgers et al.[35]** Morning recess assessed by HR:Age: β: -3.0 (0.8) -4.6 to -1.4 p ≤ 0.001Morning recess assessed by AccGender (female): β: -10.1 (2.0) -14.1 to -6.1 p ≤ 0.001Lunch recess assessed by HRProgram duration: β: -3.5 (1.5) -6.4 to -0.6 p ≤ 0.05Gender (female): β: -8.8 (1.8) -12.4 to -5.3 p ≤ 0.001Age: β: -2.1 (0.7) -3.4 to -0.8 p ≤ 0.001Lunch recess assessed by AccGender (female): β: -10.5 (1.4) -13.2 to -7.8 p ≤ 0.001Age: β: -1.3 (0.6) -2.4 to -0.2 p ≤ 0.05**Ridgers et al.[36]** Gender (female): β: -7.15 (1.42) -9.94 to -4.36 p < 0.01BMI: β: -0.55 (0.24) -1.03 to -0.07 p = 0.024Intervention x Age: β: -3.03 (1.19) p < 0.05 |
| **Counts per minute (n = 2)** |
|  | **Beyler et al.[31]**Intervention**Farmer et al.[33]**Intervention (Recess; Lunchtime). |  |
| **Steps per minute (n = 1)** |
|  | **Beyler et al.[31]**Intervention |  |
| **Walking (n = 1)** |
|  | **Elder et al.[32]**Intervention (time; time x gender). |  |
| **Activity level (active x non active) (n = 1)** |
|  | **Kelly et al.[34]**Intervention. | **Kelly et al.[34]**Playground markings.β: -0.614 (-0.924 to -0.304) p < 0.05 |

Acc, accelerometer; HR, heart rate.