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THE DIFFERENCES IN PHYSICAL ACTIVITY LEVELS AND ATTENTION IN
PRESCHOOL CHILDREN DURING FREE PLAY RECESS AND STRUCTURED
PLAY RECESS (61 pp.)

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Childhood obesity rates have increased three-fold since 1980 and up to 80% of obese children become obese adults. Since young children are forming habits that they will carry with them into adulthood, preschool represents an ideal setting to instill proper physical activity habits. Therefore, the purpose of this investigation was to assess the amount of physical activity in preschool children during three different recess conditions on separate days: *free play*, *structured play* and a *control* (non-active) condition.

Physical activity levels were measured in preschool children ($N = 22$) during three, 30-minute recess conditions; *control*, *structured play* recess, and *free play* recess. Children wore accelerometers for the duration the school day (165 minutes) for three days. Accelerometer counts during the recess sessions and for the entire school day were recorded. Each recess condition was completed on a separate day, but all during the same week. After all three recess conditions had been completed; the child was asked which recess period they preferred.

Children accumulated significantly ($p \leq 0.001$) more accelerometer counts during recess and for the entire school day in the *free play* (570 ± 460 counts \cdot min $^{-1}$ at recess; 632 ± 232 counts \cdot min $^{-1}$ during school day) and *structured* ($1,416 \pm 448$ counts \cdot min $^{-1}$ at recess; 629 ± 200 counts \cdot min $^{-1}$ during school day) recess conditions versus the *control* condition (570 ± 460 counts \cdot min $^{-1}$ at recess; 462 ± 200 counts \cdot min $^{-1}$ during school day).

Accelerometer counts during recess and for the entire school day were not different ($p \geq 0.9$) between the *free play* and *structured* recess conditions. All children indicated that they preferred either the *structured play* (55%) or *free play* (45%) recess conditions over the *control* recess condition.

Presently both a *structured play* and *free play* recess condition were equally successful in increasing physical activity behavior and were preferred versus a non-active recess condition. Providing pre-school children with the opportunity to be physically active during recess successfully increases physical activity during the school day and is preferable to a sedentary recess.