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between the music and quiet conditions, $F(2,20) = 6.039$, $\chi^2 = .860$, $p = .005$). Teachers of movement programs are encouraged to include a rhythmic component in their classes, such as music, since there was anecdotal evidence to suggest that music is motivating.

SKIPing to an active future: Training preschool teachers to promote fundamental motor skills

Brian, Ali; Goodway, Jacqueline D.; Tsuda, Emi; Famelia, Ruri; Ohio State University

The early childhood years are a critical timeframe in which to promote physical activity and motor development. NASPE (2009) identifies that young children should accumulate 60 min of MVPA per day and engage in activities that promote fundamental motor skills (FMS). Despite these national recommendations, young children who are disadvantaged demonstrate significant delays in their FMS. Early motor skill intervention provided by motor development experts shows that children significantly improve their FMS and can remediate their FMS delays with instruction. Unfortunately, motor development experts rarely exist in preschool settings and there is a dearth in the literature in regards to the ability of preschool teachers to teach FMS. The purpose of this study was to investigate the influence of a SKIP motor skill intervention (MSI) taught by preschool teachers on the FMS of preschool children. Participants ($N = 57$) consisted of a SKIP MSI group ($n = 26$) and a Comparison group ($n = 31$). The MSI group received two 30-min SKIP sessions per week for 6 weeks delivered by their preschool teacher. Prior to the intervention, teachers were provided with 30 min of pre-intervention orientation, an Apple iBook containing all intervention materials, and were coached during each MSI session by a trained expert in motor development. All preschoolers were evaluated on locomotor (LOC) and object control (OC) motor competence using the Test of Gross Motor Development-2 prior to and following the intervention. There were no pretest between-group differences ($p = .37$). A 2 Group \times 2 Time ANOVA with repeated measures revealed a significant Group \times Time interaction ($F(52) = 44.61$, $p = .02$, $\chi^2 = .608$). Follow-up analyses revealed significant differences for the SKIP group in OC and LOC ($p < .001$) from pretest to posttest. There were no significant differences in the OC and LOC scores of the Comparison group from pre- to posttest. The findings revealed that preschool teachers who receive training can effectively promote the FMS of their children using evidenced-based curricula such as SKIP.

Real cliffs and water cliffs: The role of crawling experience on infants' behavior

Burnay, Carolina, Pascoal, Joana, Cordovil, Rita; Universidade de Lisboa

Studies using visual and real cliffs indicate that shortly after crawling onset, infants have a tendency to avoid falling from dangerous heights and infants with less crawling experience try to cross the cliffs more frequently. The maturation of physical skills allows the baby to develop autonomous locomotion and to explore the environment, fostering the relationship between the perception of body abilities and possibilities of action. The approach to water surfaces has also been previously studied but in swimming pools and with adults in the water. From a child safety perspective, it is important to know the behavior of infants nearby real and water cliffs and what variables influence this behavior. In this study, 31 crawling infants between 8 and 14 months ($M = 11.52$ months; $SD = 1.56$) were tested in a real cliff (80-cm height) and a water cliff (water tank). The infants' crawling experience ranged from 3 days to 5.76 months ($M = 1.94$ months, $SD = 6.7$). Safety of the participants was guaranteed by proper climbing equipment. Five of the 31 infants fell only in the water cliff, 4 only in the real cliff and 6 in both situations. Infants with more crawling experience fell significantly less than those with less experience, both in real ($t(29) = -3.03$, $p = .005$) and in water ($t(29) = -4.03$, $p < .001$) cliffs. Further analysis suggested that avoider babies move away from the danger of falling off a dangerous height while they stay close to the water, which might increase the chances of a drowning accident.

Representation of motor interception abilities with tool use is similar in young and older adults

Caçola, Priscila M.; Pant, Mohan; Ricard, Mark; Ray, Christopher; University of Texas–Arlington

In comparison to young adults, older adults demonstrate similar accuracy with static action representation tasks that involve spatial extension via tool use. However, their ability to do so during dynamic action representation tasks remains unknown. Forty-eight young and older adults represented spatial-temporal coincidence by intercepting moving targets with their arm and tools of 10, 20, 30, and 40 cm. The task required participants to use a keypad to stop a moving target that moved away from (down-up, DU) and towards the body (up-down, UD) in three separate orientations (midline, right, left), progressively, under five conditions (arm and tools 10, 20, 30, and 40 cm). Three trials per condition were allowed. A 2 (Age) \times 5 (Condition) mixed-model analysis was conducted on the difference between the actual (correct) distance and the "stopped" distance (as determined by the participants) in each direction and orientation. There was a significant effect for Condition ($p < .05$) in all orientations and directions, but not for Age or Condition \times Age Interaction. Within each orientation, participants underestimated their interception point in the DU direction and overestimated in the UD direction. Post-hoc analyses revealed that for the DU direction, there were no accuracy differences in reach interception between the arm and all tool lengths in the midline orientation. However, significant differences were found within the left and right orientation, with greater underestimation with the arm and overestimation with the 40-cm tool. In the UD direction, participants overestimated with tools of 20, 30, and 40 cm within each orientation. Taken together, the results demonstrate that differences in accuracy are related to differences in tool length and the direction/orientation of the moving target, but not to age. In other words, young and older adults may have similar motor control knowledge to represent interception abilities. However, accuracy of space extension with tools is affected by the dynamic environment provided by the spatial-temporal coincidence task.