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HEALTH SCIENCES

THE EXPERIMENTAL EFFECT OF PARENT VERSUS PEER INFLUENCE ON CHILDREN'S PHYSICAL ACTIVITY BEHAVIOR (130 pp.)

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Current evidence supports the idea that children's physical activity is highly variable, and may be influenced by a variety of factors. Potential factors known to alter children's physical activity behavior that were examined within this dissertation include the use of mobile, internet-connected devices (e.g., tablet computers) or with whom children play (e.g., parents, peers). Therefore, the purpose of Specific Aim #1 was to measure physical and sedentary activity *with* and *without* the presence of an Apple iPad in a gymnasium. The purpose of Specific Aim #2 was to measure children's physical and sedentary activity on an outdoor playground during three conditions: playing *alone*, with their *parent* participating, and with their *friend* participating. Twenty children participated in each study where physical and sedentary activity was monitored. Results of Specific Aim #1 concluded that children accumulated fewer accelerometer counts and increased their sedentary behavior ($p \leq 0.05$) *with* the iPad present (1748 ± 1321 counts, 21.6 ± 13.5 min sitting) versus *without* the iPad present (3328 ± 781 counts, 6.2 ± 5.0 min sitting). The results of Specific Aim #2 concluded that children accumulated fewer sitting minutes and greater physical activity ($p \leq 0.05$) when playing with their parent (2.7 ± 7 min sitting, 87503 ± 37063 counts) or friend (0.9 ± 1.4 min sitting, 93363 ± 22608 counts) versus when playing alone (7.8 ± 8.2 min sitting, 70672 ± 35228 counts).

These results provide additional information when creating physical activity interventions with the overall goal of increasing children's physical activity behavior.