

moderate to vigorous (MVPA, >3 METs) intensity. Data presented provide a minimum of four days of 10-h valid recording per week (at least 1 weekend day is included). A Repeated measure ANOVA was used to analyse data and significance was set at $p < 0.05$.

RESULTS: A non significant seasonal difference was detected for time spent in MVPA (spring 129,7±82,4; summer 106,7±76,9; fall 93,5±72; winter 82,7±60,3 min/day) causing, on the contrary, a significant seasonal difference in activity energy expenditure (AEE: spring 660,5±188,3; summer 540,8±132,1; fall 538,9±152,5; winter 482,2±136,2 kcal/day; $p < 0.05$). A significant seasonal difference was found in SED behavior (spring 436,9±95,6; summer 389,7±81,2; fall 479,2±93,3; winter 473,8±80,1 min/day; $p < 0.05$). No significant differences appeared between weekly and weekend days (MVPA: weekdays 100,7±70,1; weekend 110,1±87,8; SED: weekdays 460,6±94,8; weekend 431,6±118,9 min/day). Besides, OW appeared to be more active than OB children (MVPA: OW 122,8±86,2; OB 87,3±60,8 min/day, $p < 0.05$).

CONCLUSIONS: The main finding of this study is that AH data, taking activity into account (without losing water sports or activity), indicate that for OW and OB children activity levels are highest in spring, drop in summer and reach the lowest point in winter. Besides, children do not result to be more active on weekly days than during the weekends as reported by some authors.

Kristensen PL et al. Scand J Med Sci Sports. 2008 Jun;18(3):298-308.

2095 Board #290 June 2 9:00 AM - 10:30 AM

Occupational Sitting Time, Job Productivity and Related Work Loss in Spanish University Employees

Anna M. Puig-Ribera¹, Iván Martínez-Lemos², María Giné-Garriga³, Jesús Fortuño³, Ángel Manuel González-Suarez⁴, Judit Bort-Roig¹, Nick Gilson⁵. ¹Universitat de Vic, Vic, Barcelona, Spain. ²Universidad de Vigo, Vigo, Spain. ³FPCEE Blanquerna-Universitat Ramon Llull, Barcelona, Spain. ⁴Universidad del País Vasco, Vitoria, Spain. ⁵University of Queensland, Brisbane, Australia, Australia.

Email: annam.puig@uvic.cat

(No relationships reported)

PURPOSE: While evidence highlights the negative impact of physical inactivity on job productivity, relationships between sedentary behavior at work and job performance remains unclear. Prior to the beginning of an intervention study to reduce occupational sitting, this study examined associations between sitting at work, job productivity and related work loss.

METHODS: Participants were recruited from four Spanish universities ($n=557$; 42 ± 16 years old, BMI 24.07 ± 3.7 kg/m², 62% women, 73% working full time, 58% academic). These employees completed a survey measuring time spent sitting at work (domain-specific sitting questionnaire), work performance (Work Limitations Questionnaire, WLQ) and an estimation of work productivity loss based on WLQ data (WLQ Index score). Work performance was identified using three subscales, reflecting ability to meet that day's demands for (i) output (ii) time management and (iii) mental and interpersonal skills. Differences in these subscales and the WLQ index score were compared across sitting time tertiles using ANOVA.

RESULTS: Employees classified in the lower sitting time tertile (113 ± 50 min/day, $n=184$) showed significantly better skills in dealing with time and scheduling demands at work ($F=6.9$, $p=0.001$) compared to employees classified in the upper sitting time tertile (462 ± 69 min/day, $n=172$). Scores in the WLQ Index indicated that those who sat more at work (462 ± 69 min/day) tended to have a 2% higher productivity loss compared to those who sat less (113 ± 50 min/day; $p=0.061$).

CONCLUSIONS: Preliminary data indicate that levels of sitting at work were associated with the ability to perform specific job demands in our sample. On going work will assess the impact sitting interventions have on employee work performance and job productivity loss.

2096 Board #291 June 2 9:00 AM - 10:30 AM

Evaluation of the Joint Association of Screen Time and Junk Food Consumption on Childhood Adiposity

Alexander H. Montoye, Heather Hayes, Karin A. Pfeiffer, FACS, Joe Carlson, Joe C. Eisenmann, Katherine Alaimo, Hye-Jin Paek. Michigan State University, East Lansing, MI.

Email: montoyea@msu.edu

(No relationships reported)

Both screen time (ST) and high caloric, low nutrient dense foods (e.g., junk food) are risk factors for obesity. Although several studies have examined the independent associations between these risk factors and obesity, the joint association of ST and junk food consumption (JFC) with adiposity is unknown.

PURPOSE: To determine the joint association of ST and JFC on measures of adiposity in children.

METHODS: 300 ($n=127$ males, 173 females) 3rd-5th-grade students (7.3% Caucasian, 32.7% African American, 53.3% Hispanic) from five urban elementary schools in Grand Rapids, MI were analyzed. Body mass index percentiles (BMIPCT) were determined from CDC growth charts. Percent body fat (BF) was assessed by bioelectrical impedance. Television, computer, and video game use were self-reported and summed to obtain ST. A junk food index (JFI) was created based on self-reported consumption frequency of punch, regular and diet soda, frozen desserts, baked desserts, and chocolate candy. Subjects were classified as meeting ST recommendations (≤ 2 hr/day) or not (> 2 hr/day) and as having high or low JFC based on a median split of JFI. Subjects were cross-tabulated into four groups: (G1) met ST recommendations / low JFC ($n=51$), (G2) met ST recommendations / high JFC ($n=32$), (G3) did not meet ST recommendations / low JFC ($n=124$), and (G4) did not meet ST recommendations / high JFC ($n=93$). BMIPCT and BF comparisons were made using ANCOVA, controlling for age, sex, ethnicity, self-reported physical activity (PA), and school.

RESULTS: Overall, 46% of the sample was overweight or obese, 28% met ST recommendations and 27% met PA recommendations (7 days/wk). There were no significant differences in weight status among ST-JFI groups. Likewise, there were no significant differences in BMIPCT or BF among groups (G1: BMIPCT= 70.4 ± 28.4 , BF= $27.3 \pm 9.8\%$, G2: BMIPCT= 72.7 ± 27.6 , BF= $26.4 \pm 9.1\%$, G3: BMIPCT= 70.5 ± 29.3 , BF= $25.7 \pm 8.7\%$, and G4: BMIPCT= 71.6 ± 26.0 , BF= $25.0 \pm 8.8\%$).

CONCLUSION: Neither ST nor JFC nor the joint association was related to BMIPCT or BF. The low achievement of PA and ST recommendations indicates a potential focus for intervention.

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2097 Board #292 June 2 9:00 AM - 10:30 AM

Associations of Sedentary Behaviors and Physical Activity Status with Physical Fitness among College Students

Patrick L. Schneider¹, Jeanne L. Sowers¹, Sarah J. Adams¹, Christine A. Manville¹, Lynne S. Shores¹, Mary S. Dietrich². ¹Belmont University, Nashville, TN. ²Vanderbilt University, Nashville, TN.

Email: patrick.schneider@belmont.edu

(No relationships reported)

PURPOSE: The purpose of this study was to assess associations of predominately sedentary behaviors and physical activity status with physical fitness among college students.