Title

Analysis of the association between high workload and musculoskeletal pain in public school teachers according to physical activity level

Abstract

BACKGROUND: A high workload has been associated with musculoskeletal pain in public school teachers. However, the hypothesis of the present study was that physical activity (PA) practice is able to attenuate this association. OBJECTIVE: To analyze the associations between high workload with musculoskeletal pain according to PA levels in public school teachers. METHODS: Teachers (n = 239) from 13 public schools were evaluated. Workload was assessed using a Likert scale in which teachers reported their perception of their work routine as: very low, low, regular, high, and very high. Musculoskeletal pain and PA were assessed using questionnaires. Multivariate logistic regression models were used to investigate the association of high workload with PA levels and musculoskeletal pain in different body regions, compared to participants with normal workload, adjusted by sex, age, and socioeconomic status. RESULTS: A high workload was associated with higher chances of reporting pain in the wrists and hands (OR = 3.55; 95%CI = 1.27–9.89), knee (OR = 3.09; 95CI% = 1.09–8.82), and feet and ankles (OR = 3.16; 95%CI = 1.03–9.76) in less active teachers. However, these associations were not observed in teachers considered more active. CONCLUSION: PA practice is able to act as a good protector against musculoskeletal pain in teachers, even in individuals with a high workload.

Authors

Furuta D.T.; Tebar W.R.; Beretta V.S.; Tebar F.G.; de Carvalho A.C.; Leoci I.C.;

Delfino L.D.; Ferrari G.; Silva C.C.M.; Christofaro D.G.D.

Author full names

Furuta, Debora T. (59135135300); Tebar, William R. (57148200400); Beretta, Victor S. (56966542400); Tebar, Fernanda Gil (59135149000); de Carvalho, Augusto C. (25723125000); Leoci, Isabella C. (58199554800); Delfino, Leandro D. (57193927183); Ferrari, Gerson (57208326105); Silva, Claudiele C.M. (57211446518); Christofaro, Diego G.D. (24723405400)

Author(s) ID

59135135300; 57148200400; 56966542400; 59135149000; 25723125000; 58199554800; 57193927183; 57208326105; 57211446518; 24723405400

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Affiliations

School of Technology and Sciences, São Paulo State University (Unesp), Sao Paulo,

Brazil; Centre of Clinical and Epidemiological Research, University Hospital, University of Sao Paulo, Sao Paulo, Brazil; Graduate Program in Movement Sciences, Physical Education Department, School of Technology and Sciences, São Paulo State University (Unesp), Sao Paulo, Brazil; Faculty of Health Sciences, Universidad Autónoma de Chile, Providencia, Chile; Department of Physical Education, São Paulo State University (Unesp), Presidente Prudente-SP; Brazil. Rua Roberto Simonsen, 305, Presidente Prudente, São Paulo, 19060-900, Brazil

Authors with affiliations

Furuta D.T., School of Technology and Sciences, São Paulo State University (Unesp), Sao Paulo, Brazil; Tebar W.R., Centre of Clinical and Epidemiological Research, University Hospital, University of Sao Paulo, Sao Paulo, Brazil; Beretta V.S., School of Technology and Sciences, São Paulo State University (Unesp), Sao Paulo, Brazil, Graduate Program in Movement Sciences, Physical Education Department, School of Technology and Sciences, São Paulo State University (Unesp), Sao Paulo, Brazil; Tebar F.G., School of Technology and Sciences, São Paulo State University (Unesp), Sao Paulo, Brazil; de Carvalho A.C., School of Technology and Sciences, São Paulo State University (Unesp), Sao Paulo, Brazil; Leoci I.C., School of Technology and Sciences, São Paulo State University (Unesp), Sao Paulo, Brazil; Delfino L.D., School of Technology and Sciences, São Paulo State University (Unesp), Sao Paulo, Brazil; Ferrari G., Faculty of Health Sciences, Universidad Autónoma de Chile, Providencia, Chile; Silva C.C.M., School of Technology and Sciences, São Paulo State University (Unesp), Sao Paulo, Brazil; Christofaro D.G.D., School of Technology and Sciences, São Paulo State University (Unesp), Sao Paulo, Brazil, Graduate Program in Movement Sciences, Physical Education Department, School of Technology and Sciences, São Paulo State University (Unesp), Sao Paulo, Brazil, Department of Physical Education, São Paulo State University (Unesp), Presidente Prudente-SP;

Brazil. Rua Roberto Simonsen, 305, Presidente Prudente, São Paulo, 19060-900, Brazil

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