
Title

Parent-child associations of sleep quality: is physical activity a confounder? The EPI-FAMILY health study

Abstract

Introduction: The incidence of sleep deprivation has increased in pediatric populations, however, the relationship with physical activity (PA) remains uncertain and lacks evidence. Although some studies have shown that parents' lifestyle habits can influence this process, one point that requires further clarification in the literature is whether parents' sleep quality is linked to that of their children and whether parents' physical activity could play an important role in these possible relationships. Objectives: To investigate the relationship of sleep quality between parents and children and verify the role of physical activity in this association. Methods: This is a cross-sectional study. Sleep quality was assessed using the Mini Sleep Questionnaire. The amount of sleep was estimated by the number of hours slept. PA domains (occupational activities, leisure, and active commuting) were assessed using the Baecke questionnaire, while moderate to vigorous PA (MVPA) was assessed with an accelerometer. Socioeconomic status was obtained through a questionnaire. The relationship of sleep quality between parents and children was carried out using hierarchical models with Binary Logistic Regression, where the factors were inserted one by one (1. unadjusted model; 2. sociodemographic variables; 3. children's PA; 4. parents' PA). Results: The study sample consisted of 102 children and adolescents (6-17 years), 92 mothers, and 69 fathers. Poor sleep quality of mothers was associated with their children's sleep quality (OR = 3.95; 95%CI = 1.33-11.38; P = 0.013). After inserting mothers' PA intensity into the final model, the associations remained significant (OR = 8.05; 1.33-48.59; P = 0.023). No relationship was observed between poor sleep quality of fathers and their children's sleep quality. Conclusion: The relationship between poor sleep quality of mothers

and that of their children remained significant, regardless of confounding variables.

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Authors

Druzian G.S.; Tebar W.R.; Beretta V.S.; Leite E.G.; Leocci I.C.; Santos A.B.; Antunes E.P.; Casonatto J.; Ferrari G.; Fernandes R.A.; Morelhão P.K.; Christofaro D.G.D.

Author full names

Druzian, Gustavo S. (57218215473); Tebar, William R. (57148200400); Beretta, Vitor S. (56966542400); Leite, Enrique G. (58848324300); Leocci, Isabella C. (58918312200); Santos, Amanda B. (57400995000); Antunes, Ewerton P. (57960096600); Casonatto, Juliano (24723428000); Ferrari, Gerson (57208326105); Fernandes, Rômulo A. (26028318900); Morelhão, Priscila K. (57191903650); Christofaro, Diego G.D. (24723405400)

Author(s) ID

57218215473; 57148200400; 56966542400; 58848324300; 58918312200;
57400995000; 57960096600; 24723428000; 57208326105; 26028318900;
57191903650; 24723405400

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Affiliations

Universidade Estadual Paulista (UNESP). Departamento de Educação Física, SP, Presidente Prudente, Brazil; Universidade do Norte do Paraná (UNOPAR), PR, Londrina, Brazil; Faculty of Health Sciences, Universidad Autónoma de Chile, Providencia, Chile; Universidade Federal de São Paulo (UNIFESP). Departamento de Psicobiologia, SP, São Paulo, Brazil; Sleep Institute, SP, São Paulo, Brazil

Authors with affiliations

Druzian G.S., Universidade Estadual Paulista (UNESP). Departamento de Educação Física, SP, Presidente Prudente, Brazil; Tebar W.R., Universidade Estadual Paulista (UNESP). Departamento de Educação Física, SP, Presidente Prudente, Brazil; Beretta V.S., Universidade Estadual Paulista (UNESP). Departamento de Educação Física, SP, Presidente Prudente, Brazil; Leite E.G., Universidade Estadual Paulista (UNESP). Departamento de Educação Física, SP, Presidente Prudente, Brazil; Leocci I.C., Universidade Estadual Paulista (UNESP). Departamento de Educação Física, SP, Presidente Prudente, Brazil; Santos A.B., Universidade Estadual Paulista (UNESP). Departamento de Educação Física, SP, Presidente Prudente, Brazil; Antunes E.P., Universidade Estadual Paulista (UNESP). Departamento de Educação Física, SP, Presidente Prudente, Brazil; Casonatto J., Universidade do Norte do Paraná (UNOPAR), PR, Londrina, Brazil; Ferrari G., Faculty of Health Sciences, Universidad Autónoma de Chile, Providencia, Chile; Fernandes R.A., Universidade Estadual Paulista (UNESP). Departamento de Educação Física, SP, Presidente Prudente, Brazil; Morelhão P.K., Universidade Federal de São Paulo (UNIFESP). Departamento de Psicobiologia, SP, São Paulo, Brazil, Sleep Institute, SP, São Paulo, Brazil; Christofaro

D.G.D., Universidade Estadual Paulista (UNESP). Departamento de Educação Física, SP, Presidente Prudente, Brazil

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Correspondence Address

D.G.D. Christofaro; Universidade Estadual Paulista (UNESP). Departamento de Educação Física, Presidente Prudente, SP, Brazil; email: diego.christofaro@unesp.br

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