

Economics determinants of physical activity participation in Brazil

Giacomo Balbinotto Neto², Marcia Regina Godoy¹, Angelica Massuquetti¹, Andre Filipe Zago de Azevedo¹ and Divanildo Triches¹

¹Universidade do Vale do Rio dos Sinos, Brazil

²Universidade Federal do Rio Grande do Sul, Brazil

Background: Poor diet and a lack of physical activity are major factors to the worldwide obesity epidemic, and make a significant contribution to the overall burden of disease. More than 50% of Brazilian population is obese or overweight and sedentary. The determinants of individual participation in physical activity are not well understood.

Objectives: This paper uses a time allocation framework to explore how economic and demographic factors influence participation in physical activity of women between 20 and 40 years, the South and Northeast regions of Brazil. To estimate the determinants of participation in physical activity or sport of women between 20 and 40 years, the South and Northeast regions of Brazil.

Methods: The analysis examines frequency of participation in physical activity using a probit model. We used data from the Brazilian Household Survey (Pesquisa Nacional de Amostra de Domicilios) of 2008, with survey 391.000 observations for men and women in Brazil. Our sample size is 21.971 observations for women between 20 and 40 years old. The explanatory variables included in analysis of determinants that influences the likelihood of participating in physical activity are used: The total time spending in working, non-market work (home works) and commute time to work. Individual characteristics such as age, education, income, marital status, and the presence of dependent children under 5 years-old, self-perceived health status, tobacco use, and health insurance.

Results: On average, 28% of women interviewed practiced some physical activity, but as there is a positive relationship between income and practice of physical exercise, the percentage of practitioners varies from 11% to 72% depending on the household per capita income and schooling. In the South the non-white women are more sedentary. For the duration of the practice of physical exercise, 91% of practitioners spent at least 30 minutes of physical activity. In all Brazilian regions, the walking/running is the sport modality more frequent. But there are an inverse relation between walking/running and schooling and income. The women with lower schooling and lower individual and family income do less likelihood of participation in physical activity. Furthermore, the sedentary women also invest less in health-promoting activities and smoke more. The disastrous consequences of the risky behavior of sedentary reflected on worst self-perceived health status. Women in better health are more likely to participate in more frequent physical activity. Women with dependent children under five years-olds tend to participate in lower weekly levels of physical activity. The women with high education level, despite have more time total occupied, does more physical activity. Our results from logit regressions showed that the main factors that affect the physical activity participation are schooling, income and to have children under five. The impact of schooling and income is positive.

Findings: The results confirm the health capital theory showing that women with more years of education invest more in health by doing physical activity and buying more health insurance than the sedentary women. The presence of children reduces the probability of participation, so successful policy interventions should be linked to daycare in some way. In terms of policy; the results suggest that policy makers should focus on the promotion of familyfriendly exercise programs and facilities especially for working women. The preference for walking/running suggest that policies which make exercise more convenient, and hence decrease the opportunity cost of exercise, will help to encourage more people to participate in physical activity.

Biography

Giacomo Balbinotto Neto has completed his Ph.D. from USP University. He is the Professor at Universidade Federal do Rio Grande do Sul, Faculty of Economics, Porto Alegre, Brazil. He has published more than 150 papers in reputed journals and has been serving as an editorial board member.

marciargodoy@hotmail.com