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## Trajectories of Physical Activity Intensity and Associated Factors in Men and Women from Elsa-Brasil

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**Abstract :** The intensity of physical activity (PA) over time is essential for health promotion. However, there are few studies that have analyzed the practice of different intensities of PA longitudinally. The objective was to identify PA intensity trajectories in men and women from a Brazilian multicentric cohort and their associated factors. Data from 10,367 participants (5,777 women and 4,590 men) aged 35 to 74 years from the baseline and two follow-up visits (2012-2014 and 2017-2019) of the Longitudinal Study of Adult Health (ELSA-Brasil) were analyzed. PA intensity (low, moderate, or high) was assessed using the leisure-time PA module of the International Physical Activity Questionnaire (IPAQ), and sociodemographic, behavioral, and clinical variables were included. Chi-square and T-student tests were used, considering a significant level of 5%. Four intensity trajectories were identified: low, moderate, high, and no pattern. Most participants (82.5% of women and 75.7% of men) had low PA intensity trajectories, and only 2% of women and 4.8% of men had high PA intensity trajectories. For both sexes, a significant difference (p<0.05) was found for age group, education level, income, smoking, type 2 diabetes, obesity, hypertriglyceridemia, and hypertension. Actions that promote the practice of high-intensity PA over time and consider sociodemographic, clinical, and behavioral factors are necessary.

**Keywords:** lifestyle, longterm effects, physical activity, socioeconomic factors

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