

PHYSICAL ACTIVITY LEVEL IN ASSOCIATION WITH MENTAL HEALTH BEFORE AND DURING THE RESTRICTIONS OF THE FIRST THREE WAVES OF COVID-19 PANDEMIC AMONG HUNGARIAN ADULTS

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OBJECTIVES

Physically active lifestyle has beneficial effects on physical and mental health too. The consequences of the first three waves of the COVID-19 pandemic also significantly affected the everyday life of the Hungarian population, as well as the leisure time and the amount of time spent physically active. The aim of our research is to assess the physical activity and mental health of Hungarian adult population during the first three waves of the pandemic.

METHODS

The longitudinal study based on questionnaire data during the first three waves of the COVID-19 pandemic in Hungary (2020-2021). The representative stratified sample consisted of 3600 people (18–69-year-old adults in Hungary). The International Physical Activity Questionnaire (IPAQ-SF) was used to examine physical activity patterns. To test the research hypotheses Spearman's rank correlation analysis and Wilcoxon test were calculated using SPSS 28.0 software and our results were considered significant at $p < 0.05$.

RESULTS

The mean age of the sample was 43.49 (15.13) years, the ratio of gender was representative for the Hungarian population (48.14% of females and 51.86% of males). The median (interquartile range, IQR) physical activity level of the adults (min/week) was decreased from 480.00 (230.00-1000.00) minutes / week to 310.00 (135.00-840.00) minutes/week during the restrictions ($p < 0.001$) however during the third wave of pandemic we measured significantly higher physical activity level than the beginning of the pandemic (180 (75.00-420.00), 520 (180.00-1128.75); $p < 0.001$). The total weekly physical activity (min) during the restrictions significantly associated with the mental health status ($p < 0.001$).

CONCLUSIONS

During the first wave of the pandemic, the living and working conditions of the Hungarian population changed mostly. The results of the third waves of the pandemic indicate the adaptation of individuals to the new circumstances. Our results were showed that the physically active lifestyle has a beneficial effect on mental health status.

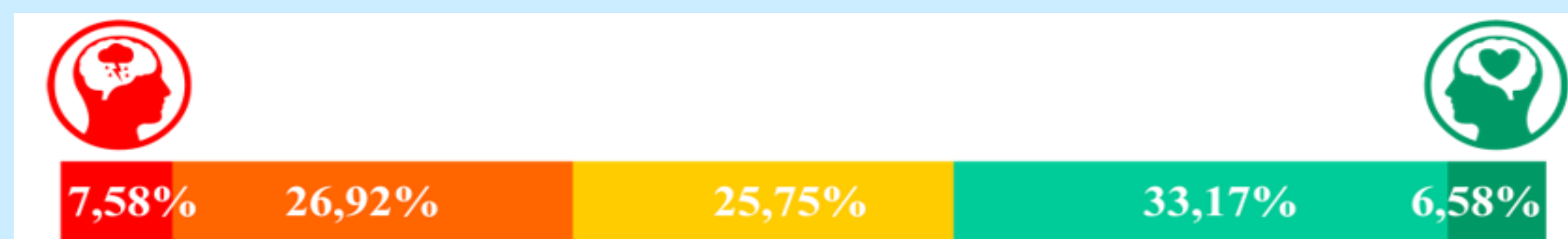


Figure 1
Subjective assessment of mental health based on the perception of respondents

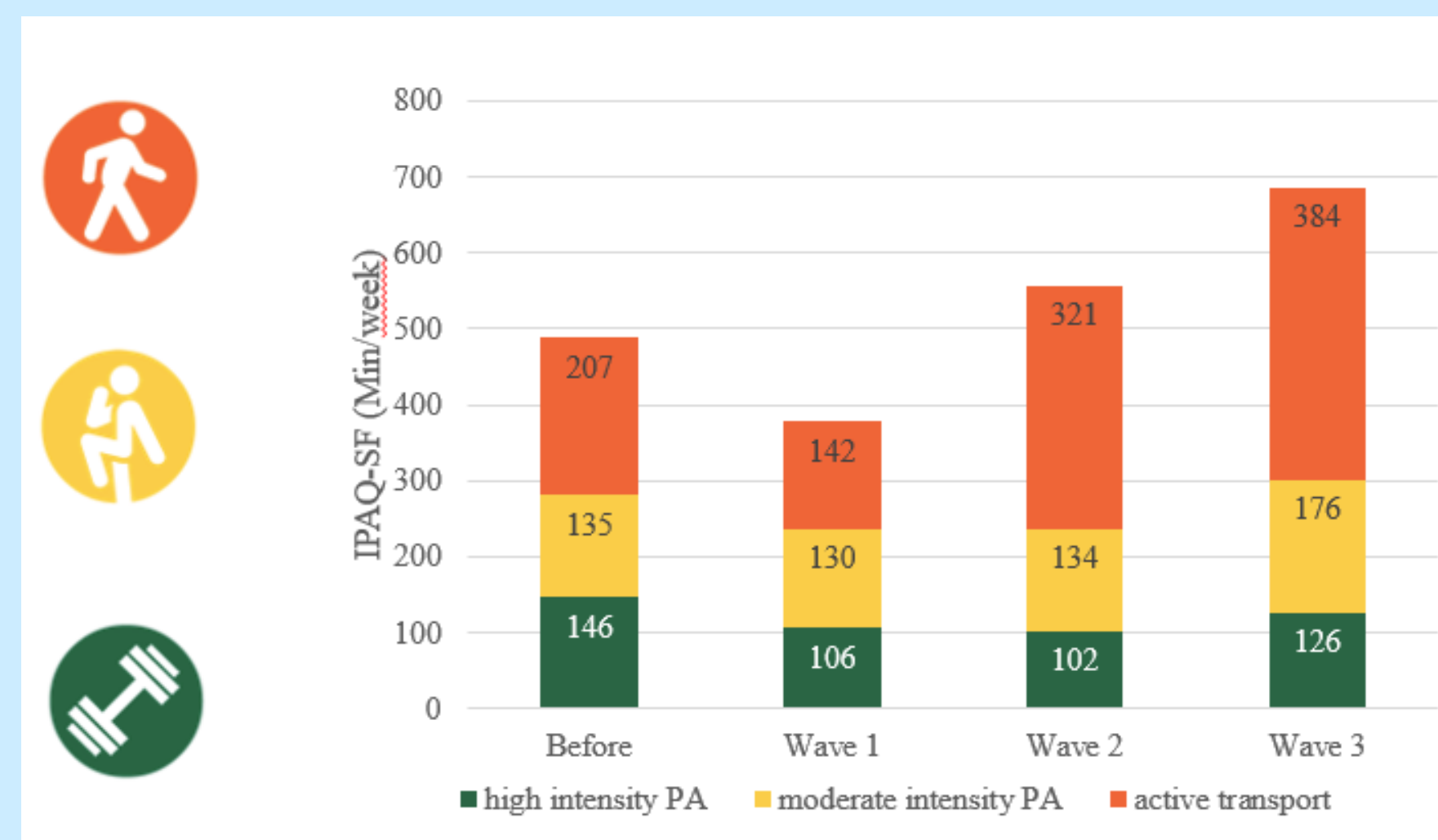


Figure 2.
Physical activity level during the first three waves of COVID pandemic (average weekly minutes) (N=3600)



Figure 3
Participation in online trainings among the Hungarian population and regular athletes (N=3600)

		Well-being	Mental health	Social support
Weekly PA minutes	R	,117**	,155**	-,121**
	p	<0,001	<0,001	<0,001
Weekly PA minutes during the restrinctions	R	,156**	,288**	-,210**
	p	<0,001	<0,001	<0,001

Table 3.
Association between physical activity, well-being, mental health and social support (N=3600)

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