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The Physical Activity Patterns and Exercise Routines during the Heatwave Season Among Young Adults

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Abstract

Objective: Regular participation in physical activity (PA) during the heatwave season is extremely challenging due to its potential to cause heat-related illness. While previous research has examined exercise practices during cold weather, exercise behaviours during the heatwave season, particularly in Southeast Asian countries, have not been sufficiently explored. Hence, this study aimed to determine the patterns of PA and exercise routines among young adults during the heatwave season.

Material and Methods: An online cross-sectional survey was conducted among 220 young adults, with a mean age of 21.09 (standard deviation [S.D.] 1.68) years. Validated questionnaires assessing PA and exercise routines were utilised. The data were analysed using established statistical software.

Results: The amount of energy expended in low-intensity activity during the heatwave season was

notably high ($1,173.65 \pm 1,303.19$ metabolic equivalent of task [MET]-minutes/week), in contrast to moderate-and high-intensity activities ($517.82 \pm 1,128.36$ MET-minutes/week and 447.91 ± 763.27 MET-minutes/week, respectively). Correspondingly, more time was spent on light-intensity activity (62.93 minutes per day ± 60.14) than on moderate-and high-intensity activities (39.91 minutes ± 48.24 and 26.36 minutes ± 45.07 , respectively). The data also showed that a large proportion of participants reported a low exercise frequency (62%). Regarding gender differences, male participants had higher levels of PA and were more likely to engage in vigorous exercise during the heatwave season (p -value <0.01). Conclusion: The PA and exercise routines were found to be substandard during the heatwave season. Health professionals should develop evidence-based exercise guidelines tailored to heatwave conditions and the specific needs of the population. © 2026 JHSMR. Hosted by Prince of Songkla University. All rights reserved.

Author keywords

exercise; gender difference; heatwave season; physical activity

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