



Editorial

Is It Time for Sports and Health in the Era of Covid-19 Pandemic?

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When we took the initiative for this Special Issue, we were uncertain about its success. Would it get submissions? Would the submissions be of high quality? Hopefully, a large number of papers were published. These high-quality papers covered a wide range of topics in Sports and Health such as different ball games [1–6], training analyses [7,8], and health aspects such as vitamin D in adolescent athletes [9], treating obesity and the metabolic syndrome [10,11], infectious diseases such as HIV [12], exercise addiction [13], the level of mood and depression [14], tobacco use in elite athletes [15], and the aspect of the Covid-19 pandemic [16,17]. We hope that these papers will contribute to the advancement of Sports and Health sciences by offering practical applications for professionals in the field.

We recognize that the Covid-19 pandemic influences all aspects of sports activities worldwide. On the other hand, it poses new challenges for Sports and Health sciences. To counteract its negative impact on both physical and psychological characteristics, many humans started to exercise outdoors (e.g., running and cycling). Already, there was an increase in recreational athletes participating in sports competitions such as half-marathons [18], marathons [19] and ultramarathons [20–23] during the past decades. In both cases (start exercising either during the Covid-19 pandemic or before), the engagement of humans—often at an advanced age and without sports experience—in regular exercise with high training volume and/or intensity raises many questions for scientists in Sports and Health. For instance, is being guided by internet videos to exercise safe and beneficial for health? Since it is globally acknowledged that “exercise is medicine”, should we also follow such videos to get our medicines instead of visiting physicians? Moreover, we observe that the popularity of training programs provided by wearables (e.g., global positioning systems, heart rate monitors) increases (Figure 1). However, can such programs replace the individualized “traditional” programs developed by Sports and Health professionals?

Although such questions seem simple, they highlight the need for exercise prescription by Sports and Health professionals especially, in the era of the Covid-19 pandemic, where the access to counseling by professionals is difficult. Maybe it is time for public health-policy makers to encourage people not simply to exercise, but to get guided by Sports and Health professionals to do so.



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Figure 1. Is it time for Sports and Health in the era of Covid-19 pandemic?

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References

1. Alesi, M.; Gómez-López, M.; Borrego, C.C.; Monteiro, D.; Granero-Gallegos, A. Effects of a motivational climate on psychological needs satisfaction, motivation and commitment in teen handball players. *Int. J. Environ. Res. Public Health* **2019**, *16*, 2702. [[CrossRef](#)] [[PubMed](#)]
2. Alipasali, F.; Papadopoulou, S.D.; Gissis, I.; Komsis, G.; Komsis, S.; Kyranoudis, A.; Knechtle, B.; Nikolaidis, P.T. The effect of static and dynamic stretching exercises on sprint ability of recreational male volleyball players. *Int. J. Environ. Res. Public Health* **2019**, *16*, 2835. [[CrossRef](#)] [[PubMed](#)]
3. Zhou, C.; Hopkins, W.G.; Mao, W.; Calvo, A.L.; Liu, H. Match performance of soccer teams in the Chinese super league—effects of situational and environmental factors. *Int. J. Environ. Res. Public Health* **2019**, *16*, 4238. [[CrossRef](#)] [[PubMed](#)]
4. Lucini, D.; Fallanca, A.; Malacarne, M.; Casasco, M.; Galiuto, L.; Pigozzi, F.; Galanti, G.; Pagani, M. Streamlining analysis of RR interval variability in elite soccer players: Preliminary experience with a composite indicator of cardiac autonomic regulation. *Int. J. Environ. Res. Public Health* **2020**, *17*, 1844. [[CrossRef](#)] [[PubMed](#)]

5. Molina-López, J.; Zarzuela, I.B.; Sáez-Padilla, J.; Tornero-Quiñones, I.; Planells, E. Mediation effect of age category on the relationship between body composition and the physical fitness profile in youth handball players. *Int. J. Environ. Res. Public Health* **2020**, *17*, 2350. [[CrossRef](#)] [[PubMed](#)]
6. Gualdi-Russo, E.; Rinaldo, N.; Pasini, A.; Zaccagni, L. Hand preference and performance in basketball tasks. *Int. J. Environ. Res. Public Health* **2019**, *16*, 4336. [[CrossRef](#)] [[PubMed](#)]
7. Clemente-Suárez, V.J.; Ramos-Campo, D.J. Effectiveness of reverse vs. Traditional linear training periodization in triathlon. *Int. J. Environ. Res. Public Health* **2019**, *16*, 2807. [[CrossRef](#)]
8. Schärer, C.; Tacchelli, L.; Göpfert, B.; Gross, M.; Lüthy, F.; Taube, W.; Hübner, K. Specific eccentric-isokinetic cluster training improves static strength elements on rings for elite gymnasts. *Int. J. Environ. Res. Public Health* **2019**, *16*, 4571. [[CrossRef](#)]
9. Seo, M.W.; Song, J.K.; Jung, H.C.; Kim, S.W.; Kim, J.H.; Lee, J.M. The associations of vitamin D status with athletic performance and blood-borne markers in adolescent athletes: A cross-sectional study. *Int. J. Environ. Res. Public Health* **2019**, *16*, 3422. [[CrossRef](#)]
10. Gianturco, V.; Gianturco, L.; Regnoli, R.; Bodini, B.D.; Turiel, M.; Trapani, M.; Bini, F.; De Angelis, G. Healthy promotion for fighting metabolic syndrome: Insights from multi-center hero-fit cohort. *Int. J. Environ. Res. Public Health* **2020**, *17*, 5424. [[CrossRef](#)]
11. Abdelkarim, O.; Ammar, A.; Trabelsi, K.; Chtourou, H.; Jekauc, D.; Irandoust, K.; Taheri, M.; Bös, K.; Woll, A.; Bragazzi, N.L.; et al. Prevalence of underweight and overweight and its association with physical fitness in egyptian schoolchildren. *Int. J. Environ. Res. Public Health* **2020**, *17*, 75. [[CrossRef](#)] [[PubMed](#)]
12. Zech, P.; Schuch, F.; Pérez-Chaparro, C.; Kangas, M.; Rapp, M.; Heissel, A. Exercise, comorbidities, and health-related quality of life in people living with HIV: The HIBES cohort study. *Int. J. Environ. Res. Public Health* **2020**, *17*, 5138. [[CrossRef](#)]
13. Bueno-Antequera, J.; Mayolas-Pi, C.; Reverter-Masià, J.; López-Laval, I.; Oviedo-Caro, M.Á.; Munguía-Izquierdo, D.; Ruidíaz-Peña, M.; Legaz-Arrese, A. Exercise addiction and its relationship with health outcomes in indoor cycling practitioners in fitness centers. *Int. J. Environ. Res. Public Health* **2020**, *17*, 4159. [[CrossRef](#)] [[PubMed](#)]
14. Irandoust, K.; Taheri, M.; Chtourou, H.; Nikolaidis, P.T.; Rosemann, T.; Knechtle, B. Effect of time-of-day-exercise in group settings on level of mood and depression of former elite male athletes. *Int. J. Environ. Res. Public Health* **2019**, *16*, 3541. [[CrossRef](#)] [[PubMed](#)]
15. Šaranović, S.D.; Vicić, J.; Pešić, I.; Tomović, M.; Batinic, Đ.; Antić, M.; Tadić, M.; Mazić, S. The influence of tobacco use on pulmonary function in elite athletes. *Int. J. Environ. Res. Public Health* **2019**, *16*, 3515. [[CrossRef](#)]
16. Szovák, E.; Varga, K.; Pelyva, I.Z.; Soós, R.; Jeges, S.; Kívés, Z.; Tóth, Á.L. Insights gained in the aftermath of the COVID-19 Pandemic: A follow-up survey of a recreational training program, focusing on sense of coherence and sleep quality. *Int. J. Environ. Res. Public Health* **2020**, *17*, 9201. [[CrossRef](#)]
17. Lesser, I.A.; Nienhuis, C.P. The Impact of COVID-19 on Physical Activity Behavior and Well-Being of Canadians. *Int. J. Environ. Res. Public Health* **2020**, *17*, 3899. [[CrossRef](#)]
18. Romaratezabala, E.; Castillo, D.; Raya-González, J.; Rodríguez-Negro, J.; Aritzeta, I.; Yanci, J. Health and wellness status perception of half-marathon runners: Influence of age, sex, injury, and training with qualified staff. *Int. J. Environ. Res. Public Health* **2020**, *17*, 5649. [[CrossRef](#)]
19. Nikolaidis, P.T.; Chalabaev, A.; Rosemann, T.; Knechtle, B. Motivation in the athens classic marathon: The role of sex, age, and performance level in greek recreational marathon runners. *Int. J. Environ. Res. Public Health* **2019**, *16*, 2549. [[CrossRef](#)]
20. Sousa, C.V.; Da Silva Aguiar, S.; Rosemann, T.; Nikolaidis, P.T.; Knechtle, B. American masters road running records—the performance gap between female and male age group runners from 5 km to 6 days running. *Int. J. Environ. Res. Public Health* **2019**, *16*, 2310. [[CrossRef](#)]
21. Knechtle, B.; Scheer, V.; Nikolaidis, P.T.; Sousa, C.V. Participation and Performance Trends in the Oldest 100-km Ultramarathon in the World. *Int. J. Environ. Res. Public Health* **2020**, *17*, 1719. [[CrossRef](#)] [[PubMed](#)]
22. Waldvogel, K.J.; Nikolaidis, P.T.; Di Gangi, S.; Rosemann, T.; Knechtle, B. Women reduce the performance difference to men with increasing age in ultra-marathon running. *Int. J. Environ. Res. Public Health* **2019**, *16*, 2377. [[CrossRef](#)] [[PubMed](#)]
23. Kazimierczak, M.; Dąbrowska, A.; Adamczewska, K.; Malchrowicz-Moško, E. The impact of modern ultramarathons on shaping the social identity of runners. The case study of karkonosze winter ultramarathon. *Int. J. Environ. Res. Public Health* **2020**, *17*, 116. [[CrossRef](#)] [[PubMed](#)]