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Letter



## Effect of the COVID-19 Detraining on Athletes' Psychological Health

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## Dear editor,

Coronavirus (COVID-19) became a widespread health crisis with a high amount of mortality and morbidity since December 2019 (1). Due to the COVID-19 pandemic, most of the major sports leagues and competitions have been postponed, and training gatherings have been canceled. The quarantine is hard for everyone, but athletes might be more susceptible to come across further mental health risks because of isolation and tedium replacing their usual dynamic lifestyles. A former study suggested that some stressors that have developed all through pandemic outbreaks have long-lasting impacts (2).

Hence, in the current study, our team tried to shed light on the probable results of the coronavirus detraining on athletes' psychological health and encourage coaches and owners of the teams to pursue appropriate interventions to reduce the unfavorable effects of detraining on the athletes.

Former quantitative and qualitative investigations have consistently demonstrated that shifting away from sport might present a remarkable risk to athletes' mental health (3). Besides, athletes' negative interpretation of the weakening of their body and sporting capabilities is expected to be chiefly stressful (4).

Alterations in the training structures such as volume, intensity, and frequency may probably lead to fitness detraining (5). The detraining triggered by canceling and suspending competitions might provoke considerable sadness, frustration, stress, anxiety, and grief for athletes. The psychological influence of the coronavirus on competitive players is actually increased due to the discontinuation of their regular training routine and social support network, which can be vital elements in handling anxiety or depression for some athletes.

Additionally, canceling and postponing the sporting events adds uncertainty to athletes' lives. During this sit-

uation, most of the professional athletes feel anxious since they have to face and handle all the insecurities that stand ahead. This duration of uncertainty over the uncertain future might enhance the feelings of worry and stress. Moreover, uncertainty is one of the main factors in inducing anxiety (6). Since it is not predictable when the world can overcome the coronavirus disease, most of the athletes do not know when they will start training and playing again. Meanwhile, they have to be ready and fit to return to the sport when they are asked, and most probably, after returning to the sport, they will be expected to train and play intensely in a short period of time. As a consequence, burnout may appear as a real problem when athletes start training programs with a dense schedule over the next couple of months or even years to compensate for canceled or suspended competitions. Burnout is also interrelated to the amplified anxiety and stress (7) that athletes might experience in the near future.

Moreover, detraining might cause several psychophysiological disorders, including lack of appetite, insomnia, headache, exhaustion, and psychological depression (8). In addition, it was reported that long-term effects of swine flu and severe acute respiratory syndrome (SARS) outbreaks on athletes included obsessive hand-washing, fear of getting too close to people, and anxiety.

On the other hand, athletes' motivation could be influenced as their aims, and goals need longer times to be achieved, and thus the targets become less pressing.

What can team owners, coaches, sports psychologists, and athletes do to overcome the probable mental damages?

Team owners and coaches have the responsibility to support and protect their athletes to ensure a training place free from hazards and consult with the health institutions and human resource practitioners to develop safe strategies to prevent the spread of COVID-19. Moreover, they have to educate their athletes on how to keep

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themselves safe physically and mentally. Besides, providing an effective mental health system such as online consultations and online courses might alleviate the consequences of coronavirus on athletes' mental health. Furthermore, presenting transparent and clear information about the team or individuals' future plans may lessen the distress of the unknown.

Also, sports psychologists must provide additional mental health support for athletes, including regular check-ins, enabling telehealth consultations, and encourage them to maintain social interactions with relatives, teammates, and friends by video chat or phone calls. Psychologists or doctors of the teams must teach athletes some effective breathing and relaxing methods as well as some approaches to sleep well to decrease stress and increase the strength of their immune system (9).

Athletes must try their best to be resilient. Being resilient is one of the key factors that help athletes adapt to the new situation, and it will certainly impact their performance in the future. More particularly, athletes have to be resilient according to how their opponents and competitors are countering and managing the situation. If they can adjust in a more efficient way than their competitors, they will have more chances to return to the sport better prepared.

Athletes also need to adjust their targets and plans. Athletes must consider this detraining period as a precise opportunity to keep improving, adjusting their goals, and learning the essential subjects they did not have enough time for in the past. A recent document reported that studying and surfing the internet, reading magazines, using e-libraries, and social networks might help turn the pandemic detraining into an opportunity to spend time increasing knowledge and creating a self-care procedure to prevent probable social harms (10).

In addition, they have to use their time smartly. The additional time must be benefited as an appropriate time to work on activities and topics that have been neglected beforehand. For instance, analyzing their technical performance, improving their knowledge about nutrition and testing new nutritional approaches, or extending their mental skills and working on their mental preparation.

It is also recommended that athletes focus on other issues. Athletes must not be shackled to the sport with no thought for anything else. The sport could raise perfectionism and obsession, and this period of staying at home can be an opportunity to concentrate on their interests, including finding new hobbies or just cooling off.

Furthermore, athletes have to protect themselves against burnout. This detraining period helps athletes recover the injuries that have been irritating, strengthen energy supplies, rest more, and practice relaxation techniques. The physical and mental rest will support athletes

against burnout when the sport returns.

Conclusions: The potential negative impact of COVID-19 on athletes' mental health and the novelty of the coronavirus outbreak urge this type of information. The main purpose of this letter is to offer the essential information to alleviate or prevent the negative influence of COVID-19 on athletes' mental health. Our team considers that the collected information and suggestions help to accomplish this goal. However, future investigations need to be based in this field to explore the unfavorable effects of coronavirus detraining on athletes' mental health. Moreover, future studies might find some other stress factors or moderating issues that are not discussed in this work.

## Footnotes

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## References

- Guan W, Ni Z, Hu Y, Liang W, Ou C, He J, et al. Clinical characteristics of 2019 novel coronavirus infection in China. MedRxiv. 2020;382(18). doi: 10.1101/2020.02.06.20020974.
- 2. Brooks SK, Webster RK, Smith LE, Woodland L, Wessely S, Greenberg N, et al. The psychological impact of quarantine and how to reduce it: rapid review of the evidence. *Lancet*. 2020;**395**(10227):912–20. doi: 10.1016/s0140-6736(20)30460-8.
- Lavallee D, Robinson HK. In pursuit of an identity: A qualitative exploration of retirement from women's artistic gymnastics. Psychol Sport Exerc. 2007;8(1):119–41. doi: 10.1016/j.psychsport.2006.05.003.
- 4. Phoenix C, Faulkner G, Sparkes AC. Athletic identity and self-ageing: the dilemma of exclusivity. *Psychol Sport Exerc*. 2005;**6**(3):335–47. doi: 10.1016/j.psychsport.2003.11.004.
- Vassilis S, Yiannis M, Athanasios M, Dimitrios M, Ioannis G, Thomas M. Effect of a 4-week detraining period followed by a 4-week strength program on isokinetic strength in elite youth soccer players. *J Exerc Rehabil*. 2019;15(1):67–73. doi: 10.12965/jer.1836538.269. [PubMed: 30899739]. [PubMed Central: PMC6416502].
- Grupe DW, Nitschke JB. Uncertainty and anticipation in anxiety: an integrated neurobiological and psychological perspective. *Nat Rev Neurosci*. 2013;14(7):488-501. doi: 10.1038/nrn3524. [PubMed: 23783199]. [PubMed Central: PMC4276319].
- Aoyagi MW, Burke KL, Joyner AB, Hardy CJ, Hamstra MS. The associations of competitive trait anxiety and personal control with burnout in sport. Athl Insight. 2009:1.
- 8. Israel S. The acute syndrome of detraining. Berlin: GDR National Olympic Committee. 1972;2:30-5.
- Hanscom D, Clawson DR, Porges SW, Bunnage R, Aria L, Lederman S, et al. Polyvagal and Global Cytokine Theory of Safety and Threat Covid-19 - Plan B. SciMed J. 2020;2:9-27. doi: 10.28991/SciMedJ-2020-02-SI-2.
- Arab Rahmatipour M, Ebadollahi-Natanzi A, Arab-Rahmatipour G. Letter to the Editor: Prevention of Depression and Psychological Stress by Studying Book in Quarantine Conditions of COVID-19. SciMed J. 2020;2(3):182-3. doi: 10.28991/SciMed]-2020-0203-7.