TACSM Abstract

Training Modifications in Endurance Athletes due to COVID-19 Restrictions

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ABSTRACT

The COVID-19 pandemic created a situation that abruptly altered the life of nearly every individual, forcing them to adjust their daily habits. Adults who regularly engaged in daily physical activity, either as recreational, collegiate, or professional athletes prior to lockdowns had to subsequently adapt and change their training regimens. **PURPOSE**: To determine which characteristics (age, sex, education level, socioeconomic status, primary endurance sport, whether the athlete is being coached or following a training program, and prior competition medaling) of recreational, collegiate, and professional endurance athletes were associated with training changes due to COVID-19 safety restrictions. **METHODS**: A cross-sectional study design was used for this study. Personal and training related descriptive statistics were collected using a Qualtrics survey that was distributed to endurance athletes around the world from June 2020 – February 2021. Significant differences between athlete characteristics and change in training status were assessed using a Chi-squared test (significance $p<0.05$) and critical adjusted standardized residuals were interpreted to determine significant associations. **RESULTS**: Approximately 2 out of every 3 (66.2%) of the 331 endurance athletes, 38.8±14.0y, changed their training due to restrictions. Significant group differences were found for age, sex, current collegiate athlete status, prior coaching status, prior use of a training program, and based on athlete primary sport compared to the whole sample. Athletes aged 18-30y changed their training at a higher portion (74.6%), while those 31-40y (56%) changed their training a lower portion. A significantly higher portion of female athletes changed their training compared to males (72.8% and 60.0%, respectively). A majority of collegiate athletes (83%), athletes who have previously worked with a coach (70.8%), athletes who have followed a training program previously (72.4%) changed their training. A significantly smaller proportion of athletes who chose running as their primary sport (55%) changed their training and a significantly larger portion of those who chose triathlon (82.1%) changed their training due to pandemic-related safety restrictions. **CONCLUSION**: The majority of athletes changed their training with COVID-19 safety restrictions, with significant differences based on personal and training characteristics. This data can be of use to safety policy makers, athletes, and coaches to consider for training approach and return to sport. Analysis of factors that allowed athletes to maintain their training and understanding the changes in athlete training can help minimize or prevent the effects of detraining for a greater portion of athletes.