

Impacts of COVID-19 on Professional Athletes:

A Study by Strava and Stanford University

As the COVID-19 pandemic disrupts every element of daily life, professional athletes - who typically travel globally, train in close quarters, and rely on their physical health for their livelihoods - have been uniquely affected. To better understand the challenges professional athletes have faced, Strava partnered with Stanford University for a study of 131 professional athletes.

The results offer a lens into the disruptive nature of COVID-19 in the athletic community. While many of the professional athletes surveyed suffered new mental, financial and physical challenges, the study ultimately offers a picture of perseverance.

Mental Health

Professional endurance athletes reported experiencing a broad range of mental health impacts.

- **1 in 5 athletes reported difficulty exercising** related to mental health, motivation, and COVID-19.
- Before COVID-19 restrictions 3.9% of athletes **reported feeling down or depressed** more than half the days in a week compared to 22.5% during COVID-19 restrictions, a **5.8X increase**.
- Before COVID-19 restrictions 4.7% of athletes **reported feeling nervous/anxious** more than half the days in a week compared to 27.9% during COVID-19 restrictions, a **5.9X increase**.
- Before COVID-19 restrictions, 2.4% of athletes **reported little interest in doing things** more than half the days in a week compared to 17.0% during COVID-19 restrictions, a **71X increase**.
- Before COVID-19 restrictions, 10.9% of athletes **reported feeling preoccupied with their athletic futures** more than three days a week after the start of the pandemic compared to 34.9% during COVID-19 restrictions, a **3.2X increase**.

Financial Impacts

The pandemic also led to financial impacts on professional athletes.

- 71% of athletes surveyed worried about receiving financial compensation for their athletic activities during COVID-19 restrictions.
- Of the athletes surveyed who received compensation from sponsors, 47% saw a reduction in paid sponsorship opportunities during COVID-19 restrictions.

Training Modifications

Professional endurance athletes reported adjusting their training behavior during the pandemic, whether they felt symptoms of COVID-19 or not.

- 12% of athletes reported COVID-19-like symptoms during the survey timeframe.
- 8% of athletes skipped at least one training session out of concern for suspected COVID-19 symptoms during the survey timeframe.
- 36% of athletes were tested for COVID-19 at least once during the survey timeframe.

Athletes reported adjusting group training whether it be with a partner, team, or coach due to COVID-19 restrictions.

- Before COVID-19 restrictions, 91.2% of athletes reported training with a partner at least one day per week, compared to 68.9% during COVID-19 restrictions.
- Before COVID-19 restrictions, 39.7% of athletes reported training with a team at least one day per week, compared to 11.6% during COVID-19 restrictions.

Athletes were also surveyed about training modifications, and activity data from Strava's platform paralleled the survey findings.

- 31% of athletes reported increasing the duration of training sessions during the survey timeframe.
- 17% of athletes reported increasing the intensity of training sessions during the survey timeframe.
- Activity data from Strava indicated that professional athletes exercised for 92 minutes per day on average before COVID-19 restrictions and 103 minutes per day during COVID-19 restrictions.
- There were no significant differences in pace (running), watts (cycling), or Relative Effort* (all activities) when comparing activities before and during COVID-19 restrictions.
 - *Relative Effort is a proprietary metric developed by Strava for athletes to measure the intensity of a workout with heart rate data, across any sport type.
- Nearly half (47%) of pro athletes reported that they felt more fit during COVID-19 restrictions than before.

Methodology

This survey was conducted in partnership by Strava and Stanford University. It includes the responses of 131 verified professional endurance athletes based in the United States, including cyclists, runners and triathletes on the Strava platform. Athletes completed a 30-question survey and 114 athletes authorized analysis of their activity data. "Before COVID-19 restrictions" signifies dates between January 1, 2020 - March 14, 2020 and "during COVID-19 restrictions" signifies dates between March 15, 2020 - August 20, 2020. The survey was conducted from August 12, 2020 through August 25, 2020.

- Population of professional athletes surveyed: 44% runner, 39% cyclist, 11% triathlete, 6% other