August 2021

The Relationship Between Sex and Injury Based on Running Mechanics of Collegiate Runners

Alena Naff  
*Ohio University*

Robert Wayner  
*Ohio University*

Janet E. Simon  
*Ohio University*

Follow this and additional works at: [https://scholarworks.bgsu.edu/jsmahs](https://scholarworks.bgsu.edu/jsmahs)

Part of the Biomechanics Commons, Exercise Science Commons, Motor Control Commons, Other Kinesiology Commons, Rehabilitation and Therapy Commons, Sports Medicine Commons, and the Sports Sciences Commons

How does access to this work benefit you? Let us know!

**Recommended Citation**

DOI: [https://doi.org/10.25035/jsmahs.07.01.02](https://doi.org/10.25035/jsmahs.07.01.02)  
Available at: [https://scholarworks.bgsu.edu/jsmahs/vol7/iss1/2](https://scholarworks.bgsu.edu/jsmahs/vol7/iss1/2)

This Professional/Faculty Abstract is brought to you for free and open access by the Journals at ScholarWorks@BGSU. It has been accepted for inclusion in Journal of Sports Medicine and Allied Health Sciences: Official Journal of the Ohio Athletic Trainers Association by an authorized editor of ScholarWorks@BGSU.
Impact of COVID-19 on Athletic Training Practice in Ohio

Matthew Kutz PhD; Jason Smith, DO, FAOASM‡; Dan Cushman, MD‡; Andrea Goldberg, M.Ed, ATC‡; Bowling Green State University, Master of Athletic Training; ‡Mercy Health Toledo; ‡University of Utah Health

OBJECTIVE
To determine how COVID-19 has impacted the clinical practice routines and mental health of Athletic Trainers.

DESIGN AND SETTING
REDCap® (Research Electronic Data Capture) was used for data collection and management. Athletic trainers in clinical practice whose practice might be disrupted by the COVID-19 Pandemic since March 2020 were emailed the COVID-19 Practice Survey.

PARTICIPANTS
2355 Athletic Trainers were emailed a link to the COVID-19 Practice Survey. 288 surveys were returned (8.2%) of those 240 were able to be analyzed (83%). The majority (62%) of respondents were female and 38% were male. The mean age of respondents was 36 (±12) and 72% earned at least a master's degree. 102 (43%) respondents reported their primary clinical setting was high school athletics, and 29% practiced in the collegiate setting.

INTERVENTION
Online survey. Data collected included basic demographic data and included sections related to current clinical practice changes as well as perceived changes to injury patterns and clinical routines that followed returned to sport participation post-quarantine recommendations. Finally, the survey included PHQ-4 (Patient Health Questionnaire-4) as a measure of psychological distress.

MAIN OUTCOME MEASUREMENTS
Measures of central tendency including descriptive statistics and frequencies are reported. One-way t-tests were used to evaluate means. Independent samples t-tests and one-way ANOVA with Tukey post hoc, were used to identify differences between respondent groups.

RESULTS
Of the athletic trainer surveyed, 176 (73%) reported that their practice of athletic training either decreased or stopped during the pandemic. 57% of respondents claimed that their current athletic training duties changed as a direct result of the pandemic. The two most common changed duties included the addition of COVID-19 screening and contact tracing (79% reported adding COVID-19 screening, 42% reported adding contact tracing; note this total is greater than 100% because several athletic trainers perform both). Other additional duties reported included office assistant or therapy aid. At the time of the survey, 79% of respondents had reported being returned to sport activity following shutdown recommendations; of those returned to sport participation, 46% of respondents perceived an increase in the frequency of acute musculoskeletal injuries of their athletes' post-shutdown. 82% of respondents reported feeling safe and efficiently equipped to practice athletic training during the COVID-19 pandemic. At the time of this survey, 56% of athletic trainers believe that they would not seek a COVID-19 vaccine if/when one became available. A majority of the respondents (N=201, 70%) completed the optional PHQ-4 survey for psychological distress; 75% of those respondents reported feeling "nervous, anxious or on edge" at least several days during the pandemic; 55% reported "not being able to stop or control their worrying" for at least several days during the pandemic; and 50% reported feeling "down, depressed, or hopeless" during the pandemic. The overall mean value of the PHQ-4 metric was M=3.51 (±3.13), which indicates mild psychological distress. A majority of the respondents (87%) reported not seeking mental health assistance or counseling for COVID-related stress.

CONCLUSION
The COVID-19 pandemic has had an immediate impact on the clinical practice routines and behaviors of athletic trainers. The most common change to clinical practice included the additional duties of COVID screening and contact tracing. Respondents reported an overall mild psychological distress as a result of COVID-19 but claimed safe and healthy working environments.

KEY WORDS: COVID-19, Impact, Behavior, Psychological Distress