

# The Relationship between Psychological Flexibility and Psychological Distress in a Sample of Student-Athletes in the United States during the COVID-19 Pandemic



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## Introduction

- ◆ Student-athletes (SA) are presented with numerous stressors and challenges both in the athletic and educational context (Proctor & Boan-Lenzo, 2010).
- ◆ Psychological flexibility may have an important role in reducing symptoms of psychological difficulties and emotional distress (White et al., 2013; Wolgast, 2014). It has been shown to mediate burnout (Chang et al., 2018) and reduce symptoms of psychological distress in athletes and improve athletic performance (Carraça et al., 2018).
- Psychological flexibility has also been found to be associated with familial bereavement distress among college students (Murrell et al., 2018).
- ◆ Emerging research suggests SAs are experiencing distress at rates up to twice higher than historically reported due to the pandemic (NCAA, 2021).
- ◆ Though there is a lack of literature on this matter (cancelation of all NCAA spring sports), psychological flexibility may be a useful construct to study as it may relate to distress and adjustment experienced by SA, thus informing effective strategies to handle career termination and transition out of sport.

## Method

## **Participants**

- ◆ 95 senior, spring-sport SAs across NCAA Divisions I, II, and III
- ◆ Nine varsity sports represented (see Figure 1)
- ◆ Age: 20-23 years old
- ◆ Participants identified as females/women (73.7%) and males/men (26.3%)
- ◆ Race identity: 88 White, 3 Black or African American, 1 American Indian/Alaskan Native, 1 Asian, 1 Hispanic/Latinx, 1 did not indicate their race or ethnicity. In total, 5 participants identified as Hispanic/Latinx
- ◆ Follow-up response rate in November 2020: 25.6%

### Measures

- ◆ Acceptance and Action Questionnaire--II (AAQ-II)
- ◆ Depression, Anxiety and Stress Scale--21 Items (DASS-21)
- ◆ Difficulties in Emotion Regulation Scale--18 items (DERS-18)
- ◆ Integration of Stressful Life Experiences Scales (ISLES)
- ◆ Satisfaction with Life Scale (SWLS)

#### **Analyses**

- Descriptive analyses were used for N = 95
- ◆ Pairwise simple linear regression analyses for measures completed in May 2020 (T1)
- $\bullet$  Pairwise correlational analyses for n = 9 between May 2020 (T1) and November 2020 (T2)

#### References

/hite, R. G., Gumley, A. I., McTaggart, J., Rattrie, L., McConville, D., Cleare, S., & Mitchell, G. (2013). Depression and anxiety following psychosis: associations with mindfulness and psychological flexibility. Behavioural and Cognitive Psychotherapy, 41(1), 3-

# Results

## Outset of the COVID-19 pandemic (May 2020)

- ◆ Emotion regulation significantly predicted psychological distress (F(1, 76) = 70.773, p < .001) and satisfaction with life (F(1, 76) = 11.244, p = .001)
- ◆ Psychological flexibility significantly predicted psychological distress (F(1, 80) = 64.049, p < .001) and satisfaction with life (F(1,81) = 15.102, p < .001)

## Six-month follow-up (November 2020)

◆ A significant, positive correlation with large effect size was found between psychological flexibility at the outset of the pandemic and psychological distress six months later (r =.754, p = .019; see Figure 2)

Given the findings of this study and with additional supporting research, we advocate for those working with studentathletes to implement interventions targeted at increasing psychological flexibility in order to reduce psychological distress as they continue navigate this unprecedented time.

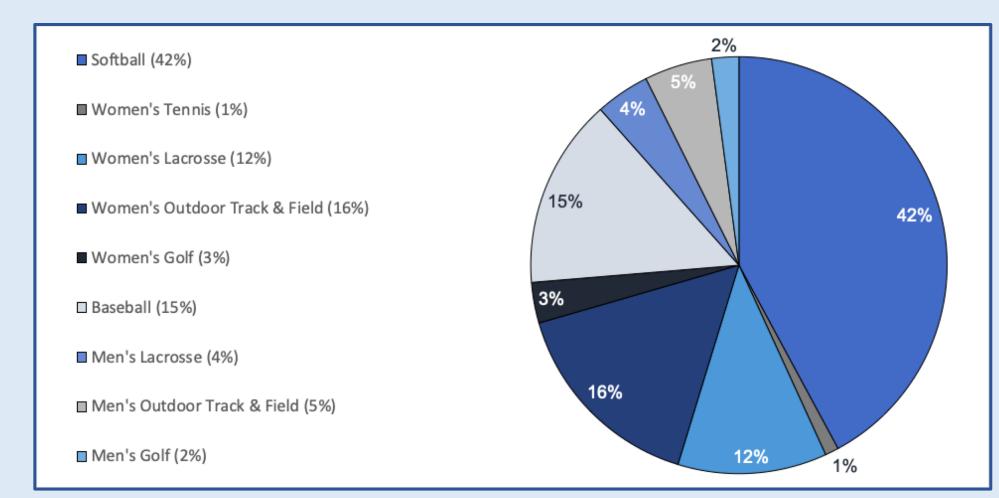


Figure 1. Percentage of senior spring athlete participants (N = 95) by varsity sport.

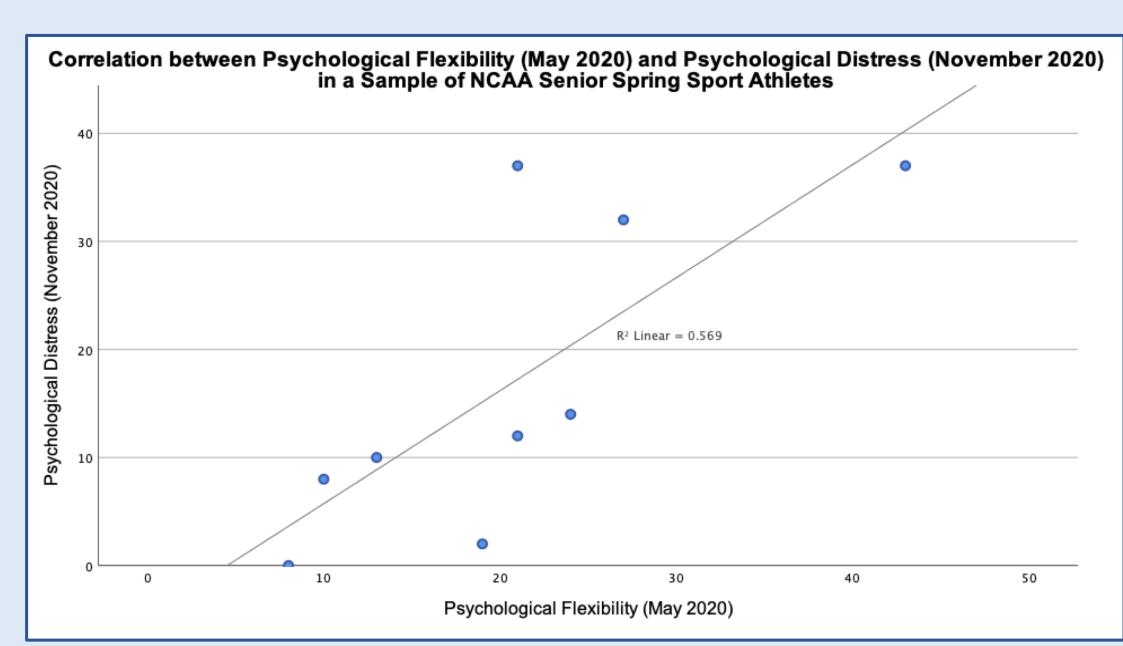


Figure 2. Pairwise correlational analyses between psychological flexibility (T1) and psychological distress (T2) for n = 9 (r = .754, p = .019).

"...I found it very difficult to feel like my life had purpose for months. I developed awful anxiety that I now experience in my love life and in my social life. The past 6 months feel like a lifetime but at the same time I feel like yesterday I was in Florida being told that my senior season was ending right then and there. It is hard to describe what kind of feelings I have felt over the past 6 months and it is hard to comprehend. I would not wish this upon anyone."

-Senior spring-sport athlete, November 2020

## Discussion

- ◆ At the outset of the COVID-19 pandemic, senior spring SA scores on emotion regulation were found to predict the extent of psychological distress and satisfaction with life for seniors. In other words, lower levels of emotion regulation predicted higher levels of psychological distress and higher levels of emotion regulation predicted lower levels of psychological distress. Further, higher levels of emotion regulation indicated higher levels of life satisfaction.
- ◆ SA levels of psychological flexibility also predicted the extent of psychological distress experienced, indicating that the more psychologically flexible SA were, the less distressed they were, and vice versa.
- ◆ SA psychological flexibility, measured at the start of the study, was found to be positively correlated with psychological distress six months later. In other words, as SA psychological flexibility scores increased (indicating lower levels of psychological flexibility), so too did their psychological distress reported six months later.