

## INTRODUCTION

- Often, stress is viewed negatively and can lead to a decline in health and wellbeing (Crum et al., 2011).
- However, recent research has found stress can be beneficial as well (Crum et al., 2011, 2013, 2017; Smith et al., 2020).
- Research has found one's beliefs about the nature of stress (e.g., stress mindset) play a large role in the extent to which one experiences these beneficial outcomes of stress (Crum et al., 2013).
- According to stress mindset theory, someone who believes the nature of stress is detrimental will likely experience more negative consequences, as compared to someone who believes stress can yield positive outcomes and views obstacles or stressors as merely a challenge rather than a threat (Crum et al., 2013, 2017).
- With such impactful outcomes related to stress mindset, having a better understanding of the stress mindset in distinct populations is necessary.
- Studies have found differences between student-athletes and non-athletes in stress levels and sources of stress (e.g., Wilson & Pritchard, 2005).
- 15% of college athletes retire from or terminate their sport participation after only their first or second year in college (Culp, 2019).
- Four major causes of sport retirement or termination have been identified: age, deselection, injury, and free choice (Alfermann & Stambulova, 2007; Ogilvie & Taylor, 1993).
- Burnout is one common reason why athletes voluntarily choose to retire or terminate their sport participation
- Sport has been found to serve as a buffer to the negative impacts of stress for some student-athletes, however, pressures associated with sport participation increase stress in other student-athletes (Kimball & Freysinger, 2003). Therefore, a comparison between stress mindset in current student-athletes and those who retired from sport or terminated their sport participation is warranted.
- Developing a better understanding of how current and former student-athletes view the experience of stress could aid in the construction of interventions that may reduce burnout or prevent athletes from terminating their sport career.

## PURPOSE

- The purpose of this study was to explore differences in stress mindset in current college student-athletes and former student-athletes whose sport participation was terminated.
- This study aimed to answer the following question: is there a difference in the stress mindset between college student-athletes and former student-athletes?

## METHODS

### Participants:

- A total of 113 students ( $n = 46$  male;  $n = 61$  female;  $n = 1$  transgender; 5 did not provide their gender) participated, including 87 current student-athletes and 26 former student-athletes.
- Participants ranged in age from 18 to 30 ( $M = 20.2$ ,  $SD = 1.92$ ). Participants were from NCAA D1 ( $n = 17$ ), D2 ( $n = 57$ ), D3 ( $n = 24$ ), NJCAA ( $n = 9$ ), and NAIA ( $n = 3$ ) schools.
- Former athletes reported terminating their sport participation due to a variety of reasons. The most commonly cited reasons were: academic struggles or the need to focus on academics ( $n = 6$ ), team or coaching issues ( $n = 5$ ), stress or burnout ( $n = 2$ ), illness/injury ( $n = 2$ ), lack of playing time ( $n = 2$ ), not enough time outside of sport ( $n = 2$ ), and changing schools ( $n = 2$ ).

## METHODS

### Instruments:

- Demographic and sport participation information
- Stress Mindset Measure (SMM; Crum et al., 2013)
- 8-item instrument which measures an individual's stress mindset
  - 5-point Likert-type scale from zero (strongly disagree) to four (strongly agree)
  - Sample item: Experiencing stress enhances my performance and productivity
  - 3 preliminary items from the SMM also included, assessing amount of stress participants were experiencing, the primary source of stress in their lives, and how stressful they perceived that source of stress to be

### Procedure:

- Recruitment via convenience and snowball sampling
- Hyperlink provided access to the study in Qualtrics, an online survey tool
- Participants provided consent to participate by clicking their agreement
- Following consent, participants completed demographic and sport participation information and the SMM

### Data Analysis:

- Data screening
- Descriptive data calculated for all variables in SPSS v. 26
- Mann-Whitney  $U$  tests conducted to assess differences in stress mindset and perceived amount of stress between current and former athletes
- Alpha level of .05 used for indication of statistical significance

## RESULTS

Table 1: Medians, means, and standard deviations

Group	Stress Mindset			Perceived Amount of Stress		
	$n$	Median	Mean $\pm$ SD	$n$	Median	Mean $\pm$ SD
Current Athletes	87	1.63	1.65 $\pm$ 0.51	82	5	4.49 $\pm$ 1.23
Former Athletes	26	1.63	1.8 $\pm$ 0.64	26	4	4 $\pm$ 1.39

No statistically significant differences were observed between current and former student-athletes in either stress mindset ( $U = 1231.5$ ,  $p = .494$ ,  $\eta^2 = .004$ ) or perceived amount of stress ( $U = 884$ ,  $p = .171$ ,  $\eta^2 = .025$ ).



## CONCLUSIONS

- No statistically significant difference in stress mindset or perceived amount of stress were found between former and current student-athletes.
- Given that stress mindset reflects one's view of the process of stress itself and not simply an appraisal of any given stressor, current and former student-athletes may not differ in stress mindset but may appraise their sport or stress stemming from their sport differently.
- Former athletes reported terminating their sport participation for many reasons other than stress or burnout, suggesting that stress or burnout may not have played a large role in former athletes' sport termination in this study.
- Current student-athletes may still be experiencing burnout but have not yet terminated their sport participation.
- Limitations include the small sample size of former athletes and the mode of data collection (online survey).
- Future research should continue to examine these concepts outside of a global pandemic as increased amounts of stress have been reported for college students since the onset of the pandemic (e.g., ActiveMinds, 2020).
- Burnout was not explicitly measured in the current study but should be included in future studies to examine a possible correlation between burnout and stress mindset.
- Both current and former student-athletes were found to have a stress-is-debilitating mindset and given the positive results from stress mindset intervention studies (e.g., Crum et al., 2013), all college students may still benefit from such an intervention.

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