# INTERCOLLEGIATE SPORT

## Revealing Mental Health in Student-Athlete Recruitment: Exploring Coach Perceptions and Bias

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Mental health issues (MHI) among student-athletes have increased in recent years, yet their true prevalence may be underestimated due to the negative consequences surrounding disclosure for athletes. Coaches play a crucial role in providing social support and reducing stigma, making their perspectives imperative to consider when studying student-athlete mental health. This study investigates how college coaches perceive mental health-related information in the transfer recruiting process. Through a 2 X 2 between-subjects online experiment (n = 155), we explore how student-athletes are perceived when their previous college coach does or does not indicate the athlete experiences MHI. Findings indicate a bias in how coaches report the performance of athletes with MHI, despite recognizing the need to avoid discrimination. These results highlight the dual challenge coaches face in managing their implicit biases and inclusive recruitment processes.

**Keywords**: student-athlete, athlete recruitment, mental health

Lauren Bernett was the starting softball catcher at James Madison University. Jayden Hill was a first-year Northern Michigan University female track and field athlete. Robert Martin was a fifth-year goalie for Binghamton University's men's lacrosse team. Katie Meyer was a star senior women's soccer player at Stanford University. Sarah Shulze was a celebrated runner on the women's track and cross-country teams at the University of Wisconsin-Madison. These five talented National Collegiate Athletics Association (NCAA) student-athletes tragically passed away from suicide in the spring of 2022 (Siefert, 2022). Student-athletes are often role models in managing intense, high-pressure environments and appear physically and mentally unbreakable. The glorified image of student-athletes—strong bodies, disciplined minds, and a competitive drive—may lead onlookers to downplay the seriousness of their susceptibility to mental health issues (MHI; Andone, 2022).



Student-athletes report mental health stigma as one of the leading causes preventing them from disclosing or discussing MHI (Hilliard et al., 2022; Rao & Hong, 2020). Mental health stigma occurs when the label of a mental health disorder leads people to be perceived as less than whole, dangerous, unstable, and undesirable (Goffman, 1963). Though people may overtly express greater tolerance toward those with MHI, they may still have implicit biases (Greenwald & Banaji, 1995) that impact cognitive processes relevant to perception. Stigma trickles down to negatively impact one's self-esteem and sense of belonging (Corrigan, 2004). The lack of disclosure of MHI by student-athletes is not surprising, considering the historic denigration of student-athletes who sought mental health support (Linder et al., 1989, 1991). The denigration is intensified when the student-athlete receives a formal mental health diagnosis; athletes may be perceived as weak, unstable, and less valuable when they seek mental health services—the very antithesis of the mentally tough student-athlete stereotype (Merz et al., 2020). Indeed, Linder et al. (1991) found male undergraduates were significantly less likely to recommend an athlete for a draft who consulted a sports psychologist, counselor, or coach to improve performance. Although perceptions of athletes who work with sports psychologists have become more favorable, student-athletes who reveal (versus those who do not reveal) MHI are still viewed as less valuable and offered less money when signed in professional sports (Merz et al., 2020). Further evidence suggests stigma associated with MHI has lessened over time, most markedly for depression; however, it has not been completely eliminated (Pescosolido et al., 2021).

Given this, it is unsurprising student-athletes are hesitant to discuss or disclose MHI. Leaving these issues unresolved, coupled with the high expectations from themselves and others (e.g., coaches, family, athletic department), may lead student-athletes to keep pushing themselves to – and sometimes off – the edge (Brown et al., 2014). Therefore, it is critical to address potential mental health stigma among those who support student-athletes.

## **Literature Review and Theoretical Framework**

## **Coach Support and Athlete Mental Health**

Coaches are a primary support mechanism for student-athletes (Kroshus, 2019), and their destignatization of MHI may have a considerable impact on encouraging help-seeking behavior (Bissett et al., 2020). Prior research emphasizes a coach's influence extends beyond athletic performance, playing a vital role in the overall well-being of student-athletes (Castaldelli-Maia, 2019). However, disclosing MHI to coaches can sometimes lead to perceptions of reduced performance or value to the team (Mertz et al., 2022). Coaches are also the primary gatekeepers to athletic scholarships for student-athletes, and their insight into an athlete's mental health may alter the likelihood of offering a spot on the team and a scholarship (Castaldelli-Maia, 2019). Research indicates that mental toughness is one of the most critical psychological factors linked to success in sport (Crust, 2007), and some research suggests mental toughness to be positively correlated with MHI (Gucciardi et al.,

2017), emphasizing the importance of mental health in the recruitment process for coaches. On the other hand, some of the most successful professional athletes of all time have experienced MHI, including Naomi Osaka, Simone Biles, Abby Wombach, Serena Williams, Aly Raisman, Kevin Love, Ronda Rousey, and Michael Phelps (McDowell, 2021). Coaches who stigmatize student-athletes with MHI might lose out on not only working with some of the greatest athletes but also on building successful teams. Conversely, college coaches may not have the time, desire, energy, or knowledge to deal with issues beyond ensuring their student-athletes push themselves to never-ending improvement and sports success.

The known presence of MHI stigma for athletes (Deatherage et al., 2022) makes the conversation about MHI in the recruiting process important to address. Research supports both the prevalence of MHI in student-athletes and the persistence of stigma. However, how these factors manifest in the context of college recruiting remains underexplored. The current study examines how mental health status, specifically when MHI is cited versus when it is not, is perceived by college coaches during the transfer recruiting process.

In the following section, we discuss the MHI prevalence among student-athletes. Guided by stigma theory (Goffman, 1963), we describe why college coaches, who play a pivotal role in supporting student-athletes' mental well-being (Powers et al., 2020), might stigmatize student-athletes with MHI.

#### Mental Health and Student-Athletes

Mental health, as defined by the NCAA, is a state of well-being that enables student-athletes to handle the demands of their various roles while also recognizing their potential in sports, academics, and other significant areas of their lives (NCAA, 2024a). There are over half a million student-athletes in the National Collegiate Athletic Association (NCAA; NCAA, 2022), with varying reports of MHI prevalence in this population. The most commonly reported MHI among student-athletes include anxiety, depression, and eating disorders (Hutchinson et al., 2025). The American College of Sports Medicine (2021) reports 30% of female and 25% of male student athletes experience anxiety, and more recent NCAA (2023) data shows a decrease in mental health concerns among student-athletes. From Fall 2021 to the 2022-23 academic year, male student-athletes feeling overwhelmed decreased from 25% to 17%, and female student-athletes feeling overwhelmed decreased from 47% to 44% (Radford, 2023). However, the NCAA (Henry, 2023) shared student-athletes reporting mental health issues is one and a half to two times higher than before the COVID-19 pandemic. In contrast, Abrams (2022) notes over 60% of the United States college students suffer from at least one mental health issue. Although student-athletes report lower levels of MHI compared to the general student population, athletes are more likely to engage in risk-taking behaviors (Nattiv et al., 1997), and impulsivity (Vaughan et al., 2021), making them more vulnerable to the negative outcomes of MHI (Pichler et al., 2023). Furthermore, student-athletes experience added levels of stress relative to non-athletes, despite not being reflected in the MHI prevalence

statistics. These stressors include adjustment to competing demands, coping with on-field success and failure, dealing with the end of their athletic career, injuries, a perceived loss of 'star status,' traveling for competition, and more (Cutler & Dwyer, 2020; Pritchard & Wilson, 2005).

#### Stigma Theory

Although 30% of college students generally seek help for their MHI, only 10% of student-athletes seek help (NCAA, 2023a; also see Velasco, 2017). Despite knowing where to go for mental health support, only 50% of student-athletes reported feeling comfortable seeking help (NCAA, 2023b).

Stigma remains one of the most significant barriers to help-seeking among student-athletes (Deatherage et al., 2022) and is reinforced by the broader societal stigma around mental health, as supported by Goffman (1963). Traits typically associated with successful athletes include high self-confidence and physical and mental strength (Bauman, 2016), and disclosing a mental health issue may seem contradictory to these hallmark traits of a high-performing athlete. Due to the contrast between stereotypes of those who suffer from MHI and stereotypes of successful athletes, we propose that college coaches during recruiting will perceive prospective student-athletes who cite (versus those who do not cite) MHI more negatively.

#### Method

#### **Participants**

One hundred eighty-eight coaches agreed to participate in the survey. Of these, we excluded 26 who did not finish the survey and seven who did not indicate they understood the instructions. The remaining 155 participants (see Table 1) were included regardless of their responses to items intended to serve as quality checks<sup>1</sup>.

#### **Inclusion Criteria**

Participants included current and past college coaches from NCAA Divisions I, II, and III, the National Junior College Athletic Association (NJCAA) Division I and II, and the National Association of Intercollegiate Athletics (NAIA). Participants were eligible to participate if they had coached student-athletes involved in one of the major U.S. collegiate athletic associations (NCAA, NJCAA, and NAIA) in some

¹ We originally included three different manipulation checks. The first asked participants to select a box indicating they read the stimuli, but the high failure rate (N = 24) suggested that the box may not have been prominent enough to elicit responses. The second and third manipulation checks asked participants to report the mental health status and origin of the student-athlete they read about. Responses included the actual conditions as well as an "I do not remember" option. If the participants were in a condition in which no MI was mentioned, it would make sense that they selected "I do not remember" simply because the information was never presented. Twenty-seven participants in the no mental health condition failed the mental health check (29% within-condition failure rate), compared to only three in the mental health condition (5% within-condition failure rate). Likewise, 18 participants in the domestic condition failed the origin status question (23% within-condition failure rate) compared to 13 in the international condition (17% within-condition failure rate). Thus, we included participants regardless of their responses to the manipulation check.

capacity and were comfortable reading and writing in English. Recruitment occurred between October 31, 2022, and February 1, 2023. Given that recruitment mostly encompassed Division I coaches, the sample is predominantly representative of Division I coaches, reflected in the Governing Body and Division demographics in Table 1.

#### Direct Outreach and Snowball Sampling

Participants were recruited via word-of-mouth, snowball sampling (Patton, 1990), and direct outreach to participate in an online questionnaire conducted on Qualtrics. At the end of each questionnaire, participants were asked to provide the name and email of any other college coaches they thought would be willing to participate in the study.

Direct outreach was conducted via publicly available email addresses. Specifically, a Division I conference was randomly selected, followed by the random selection of a school within the conference. Emails were then sent to all coaches at that school, across all job titles, before proceeding to the next randomly selected conference. Approximately 3,500 coaches were invited to participate through direct outreach, with the remaining recruited via word of mouth and snowball sampling. Although direct outreach recruiting led to lower response rates compared to word-of-mouth or snowball sampling, it reduced the selection bias (Winship & Mare, 1992). The overall response rate was not collected.

#### Compensation

Upon completing the study, participants were compensated with a \$10 Amazon gift card distributed via email.

 Table 1

 Demographic Information of College Coaches

Demographic Variable	n (%)
Gender of Coach	
Male	88 (56.8)
Female	64 (41.3)
Non-binary	1 (0.7)
Prefer not to say	2 (1.3)
Race/Ethnicity	
Asian	3 (1.9)
Black or African American	12 (7.7)
Hispanic/Latino	11 (7.1)
White	126 (81.3)
Another race not listed	3 (1.9)

Nationality	
Domestic	101 (65.2)
International	21 (13.5)
Dual US Citizen	3 (1.9)
No response	30 (19.4)
Coaching Role	
Head Coach	59 (38.1)
Assistant Coach	83 (53.5)
Volunteer Coach	6 (3.9)
Other	7 (4.5)
Gender of Teams Coached	
Both Men's and Women's	69 (44.5)
Men's	27 (17.4)
Women's	59 (38.1)
Governing Body and Division	
NCAA Division I	142 (67)
NCAA Division II	26 (12)
NCAA Division III	35 (16)
NJCAA Division I	5 (2)
NJCAA Division II	1 (.4)
NAIA	4 (2)

*Note.* n = 155. For coaches with multiple coaching roles, the most senior position is listed. Governing Body and Division is not mutually exclusive.

## **Procedure and Design**

The Institutional Review Board approved this study prior to execution. Participants took part in an online survey focused on "Methods for Recruiting College Student-Athletes." They were told they would partake in a 10-minute study to learn more about how different student-athlete background characteristics influenced recruiting.

After reading the questionnaire information sheet and consenting to participate, participants were randomly assigned to receive one of four coach's reports of a current student-athlete interested in transferring to another program. The coach's report was presented as a screenshot of a voicemail transcript in iPhone format (for an example screenshot, see Appendix A). Participants were assigned one condition in a 2 (student-athlete origin: international vs. domestic) x 2 (mental health status: MHI cited vs. no MHI cited) between-groups factorial design.

Specifically, participants either viewed a student-athlete who the college coach described as either international (i.e., "I am calling about an international student-athlete who has just entered the transfer portal for their junior year.") or domestic (i.e., "I am calling about a domestic student-athlete who has just entered the transfer portal for their junior year."). The college coach also mentioned that the student-athlete either had MHI ("They have an interesting character and experience MHI") or did not mention MHI ("They have an interesting character."). The gender of the student-athlete was not described, and no revealing adjectives were given.

Limited, subjective information is intentionally provided in each voicemail to allow any mental health biases to become more apparent, as these biases may not surface with the availability of objective, comprehensive information (Greenwald et al., 2003). After reviewing one of four student profiles, the participants rated the student-athletes on several measures.

#### Measures

#### Recruiting Items

Subject matter experts (SME) consisting of three authors, one of whom is a sport psychologist and previous coach, and two of whom are current and former studentathletes, developed eight items to assess coaches' reactions to a prospective transfer student-athlete. These items were created to explore whether factors unrelated to MHI status might, in fact, be perceived differently due to stigma (Goffman, 1963; Pescosolido et al., 2021) associated with MHI. Coaches rated the prospective student on (1) value to the program, (2) likeability, (3) trustworthiness, (4) ability to perform under pressure, (5) worthiness to receive an athletic scholarship, (6) unreliability (reverse-coded), (7) likelihood of problematic behavior (reversecoded), and 8) weakness (reverse-coded). These single-item measures were used to allow participants to rate the student-athlete on a number of dimensions in a timeefficient manner. Single-item measures are a reasonable alternative to multi-item measures and provide strong correspondence to multi-item measures (Matthews et al., 2022). See Appendix B for the exact wording of each item. In response to one of the four student profiles (Heilman, 1980), participants reacted to these eight items on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Coaches also indicated if they would follow up with the student on a single item with two responses ("Yes" or "No").

#### **Open-Ended Questions**

College coaches were also asked three open-ended questions to gather information on how they approach and view mental health in recruiting. These three questions include: a) If you follow up with this student-athlete, what questions would you like to ask them? b) How would this student-athlete contribute to your program? c) During recruiting do you try to get information on the mental health of the student-athlete? If yes, how do you get this information? The answers to these questions were

thematically examined. See Table 5 for open-ended questions and themes gathered from college coach responses.

#### **Analytic Approach**

For quantitative analyses, we conducted a 2 (student-athlete origin: international, domestic) x 2 (mental health status: MHI cited, no MHI cited) multivariate analysis of variance (MANOVA) on the eight dependent variables assessing coaches' responses to the student-athlete. We probed the significant effects of student-athlete MHI status on each outcome using pairwise t-tests. For all t-tests, we report both unadjusted p-values and p-values adjusted using the False Discovery Rate correction for Type I errors in multiple pairwise tests. Participants with missing data on any of the eight dependent variables were excluded from analyses, resulting in a quantitative analysis sample of 155 participants. Because we were restricted in data collection due to money and time constraints, we did not initially conduct a priori power analysis. Instead, we sought the advice of an independent researcher and asked them to conduct an a priori analysis using G\*Power. Results indicated the required sample size to achieve 80% power for detecting a medium effect with  $\alpha =$ .05 was n = 128 for a MANOVA testing global effects with four groups and eight response variables. Thus, our obtained sample size of 155 was adequate to test our hypotheses.

We used a summative content analysis approach for the qualitative analyses (Hsieh & Shannon, 2005). Different undergraduate research assistants blind coded each open-ended response for general themes and occurrences of themes. Each undergraduate research assistant was asked to code two questions, and we used eight coders. All coders were trained on content analysis prior to coding and were instructed to allow insights to emerge (i.e., category induction) as they read through participant responses. Frequency counts by theme were calculated and compared. A subject matter expert (AUTHOR 2 [initials blinded for review]) then reviewed the comments and themes generated by research assistants and assigned final thematic codes to each comment. Initial and resolved codes, as well as detailed code definitions, can be viewed in the data repository.

## **Transparency and Openness**

We report how we determined our sample size, all data exclusions, all manipulations, and all measures in the study. A deidentified dataset (with potential identifiers redacted), analysis code, and research materials are available at https://osf.io/ptjfv/?view\_only=839f02c7dacd4841b44d7a6d35ac988e. Data were cleaned and analyzed using R version 4.2.3 (R Core Team, 2023), *tidyverse* version 2.0.0 (Wickham, 2016), *openxlsx* version 4.2.5.2 (Schauberger & Walker, 2023), *scales* version 1.2.1 (Wickham & Seidel, 2022), *flextable* version 0.9.1, (Gohel & Skintzos, 2023), *psych* version 2.3.3 (Revelle, 2023), and *apaTables* version 2.0.8 (Stanley, 2021). This study's design and analyses were not pre-registered.

### **Results**

#### **Quantitative Results**

Means, standard deviations, and correlations between study variables are presented in Table 2. A 2x2 MANOVA indicated the predicted multivariate interaction between student-athlete origin and mental health status was not significant, Pillai's trace = 0.02, F(8, 141) = 0.31, p = .96. There was, however, an overall significant main effect of student mental health status on overall evaluations, Pillai's trace = 0.23, F(8, 141) = 5.31, p < .001.

As shown in Table 3, pairwise comparisons suggested mental health status significantly impacted ratings of scholarship worthiness, t(123.6) = -2.69,  $p_{\text{adjusted}} = .04$ , d = -0.44 and problematic behavior, t(121.8) = 3.16,  $p_{\text{adjusted}} = .02$ , d = 0.52. Interestingly, and inconsistent with expectations, student-athletes with MHI were evaluated as more worthy of scholarship support and less problematic than those without MHI. After adjusting for the familywise error rate, some pairwise comparisons were marginally significant: valuable, t(134.5) = 2.07,  $p_{\text{adjusted}} = .12$ , d = 0.34, likable, t(140.9) = 1.81,  $p_{\text{adjusted}} = .12$ , d = 0.29, trustworthy, t(144.1) = 1.63,  $p_{\text{adjusted}} = .12$ , d = 0.26, perform well under pressure, t(121.2) = 1.66,  $p_{\text{adjusted}} = .12$ , d = 0.28, unreliable, t(139.2) = 1.74,  $p_{\text{adjusted}} = .12$ , d = 0.28. The remaining pairwise comparisons was not statistically significant: weak, t(126.1) = -0.56,  $p_{\text{adjusted}} = .58$ , d = -0.09.

 Table 2

 Means, Standard Deviations, and Bivariate Correlations Between Study Variables

Recruiting Variable	M	SD	1	2	3	4	5	6	7
1. Valuable	3.10	0.92							
2. Likeable	3.68	0.83	.53**						
3. Trustworthiness	3.49	0.82	.53**	.72**					
4. Scholarship worthiness	2.97	0.91	.41**	.31**	.31**				
5. Perform Well Under Pressure	2.64	0.78	.32**	.27**	.34**	.34**			
6. Unreliable	3.24	0.88	.48**	.50**	.56**	.27**	.26**		
7. Problematic	3.45	0.96	.50**	.51**	.58**	.25**	.30**	.69**	
8. Weak	3.50	0.95	.45**	.35**	.41**	.35**	.29**	.57**	.56**

Note. n = 155. M and SD are used to represent mean and standard deviation, respectively. \* p < .05. \*\* p < .01.

**Table 3** *Means (Standard Deviations) and Pairwise Tests of Evaluations by Student Mental Health Status* 

Dependent Variable	Mental Health Issue Mentioned	Mental Health Issue Not Mentioned	Pairwise Comparison
Valuable	2.92 (0.90)	3.23 (0.92)	$t(134.5) = 2.07, d = 0.34, p_{\text{adjusted}}$ = .12, $p_{\text{unadjusted}} = .04$
Likable	3.54 (0.78)	3.78 (0.85)	t(140.9) = 1.81, d = 0.29, $p_{\text{adjusted}} = .12, p_{\text{unadjusted}} = .07$
Trustworthy	3.37 (0.75)	3.58 (0.85)	t(144.1) = 1.63, d = 0.26, $p_{\text{adjusted}} = .12, p_{\text{unadjusted}} = .11$
Worthy of Continued Scholarship Support	3.21 (0.95)	2.80 (0.85)	t(123.6) = -2.69, d = -0.44, $p_{\text{adjusted}} = .04, p_{\text{unadjusted}} = .008$
Perform Well Under Pressure	2.51 (0.84)	2.73 (0.73)	t(121.2) = 1.66, d = 0.28, $p_{\text{adjusted}} = .12, p_{\text{unadjusted}} = .10$
Unreliable	3.10 (0.84)	3.34 (0.90)	$t(139.2) = 1.74, d = 0.28, p_{\text{adjusted}}$ = .12, $p_{\text{unadjusted}} = .08$
Problematic	3.16 (1.00)	3.65 (0.88)	$t(121.8) = 3.16, d = 0.52, p_{\text{adjusted}}$ = .02, $p_{\text{unadjusted}} = .002$
Weak	3.56 (1.00)	3.47 (0.92)	t(126.1) = -0.56, d = -0.09, $p_{\text{adjusted}} = .58, p_{\text{unadjusted}} = .58$

*Note.* Degrees of freedom vary due to item-level missingness. Effect estimates reflect the univariate effect of MHI status on outcomes. *d* indicates Cohen's *d* effect size estimates. Adjusted *p*-values reflect *p*-values adjusted for multiple comparisons using the False Discovery Rate method. We report unadjusted *p*-values as well for the sake of full reporting.

#### **Qualitative Results**

Themes, frequencies, and exemplary quotes from the qualitative analyses are displayed in Table 4. For the first question, which asked about the questions coaches would ask the student-athlete should they follow-up, coaches frequently asked questions about why the student-athlete was transferring. However, this response tended to be more frequent in the no MHI condition (51%) relative to the MHI condition (38%). Coaches also asked about the student-athlete in general and their specific personal characteristics. Additional questions about athletic and academic performance were mentioned by some coaches (20%). The second openended question asked coaches about how the student-athlete would contribute to the program. Nearly half of respondents (44%) indicated they required more information to answer the question. One-third of participants (33%) suggested the student-athlete could potentially contribute positively to the team—this response was endorsed relatively equally by those in the MHI condition (30%) and the no MHI condition (34%). However, perceptions that the student-athlete would not contribute to the team were more common in the MHI condition (16%) relative to the no MHI condition (6%). Finally, the third open-ended question asked about how, if at all, coaches obtain information about student-athletes' mental health status in general. Overall, 52% of coaches indicated they do try to get information on the mental health of a student-athlete during the recruiting process. In the MHI condition, 48% of coaches indicated asking coaches, staff, or parents about mental health status in general. Coaches in both conditions reported similar strategies, including asking previous coaches and people close to the student-athlete about their well-being, directly or indirectly. Indirect ways of obtaining student-athlete mental health information included asking about constructs related to mental health (i.e., stressors, challenges) and observing the student. Only 8% of coaches in each condition mentioned connecting students to mental health resources.

 Table 4

 Overview of Themes from Open-ended Questions

			% Mentione	d
Theme	Exemplary Quote	Overall	Mental Health Issue	No Mental Health Issue
	ou follow up with this student-athlete, sing responses)	what questio	ons would you like	to ask them? (N
Reasons for transfer	"I'd ask why they are transferring."	46%	38%	51%
Get to know student better	"Describe how you started in the sport and what drives you to continue training, practicing, and competing. Please tell me a few of your goals for the next season." sic	28%	32%	25%
Personal character attributes	"I would look into their ability to be a team player, character, academics, and ability to get along with their teammates." sic	25%	18%	30%
Athletic performance	"What position, how much playing time they got, why they are transferring"	20%	20%	20%
Academic performance	"Mostly just to see transcripts or test scores."	14%	10%	16%
Mental health history	"Why are you transfering? What issues caused you to look elsewhere? What kind of MHI are you experiencing?"	8%	20%	0%
Question: How responses)	would this student-athlete contribute	e to your prog	gram? (N = 147 n	on-missing
Need more information	"Depends on how good of a player they are, how much they buy in to our program and culture"	44%	40%	46%

Contribute positively to team culture	"Seems like they are a team player and that's what I look for in my athletes. I want them to benefit the team both athletically and academically as well as the team benefit them"	33%	30%	34%
Would not contribute	"Based on talent identification from former coach the student athlete would not score points."	10%	15%	6%
Role player	"Could be a good training partner for higher level athletes"	10%	7%	11%
Athletic potential	"They may be a point scorer at our conference meet"	8%	7%	9%
	ing recruiting do you try to get inforn how do you get this information?	nation on the	mental health of	the student-
Ask coach, staff, or parents	"Coaches, opposing coaches, teachers, and counselors."	36%	48%	29%
Ask student directly	"Ask the SA [student athlete] about any challenges they have previously faced and how they dealt with those challenges."	28%	20%	31%
Ask about challenges	"Asking questions about what stresses them and how they respond? Talk to their coaches on character, maturity?"	26%	16%	31%
Determine indirectly (i.e., asking indirect questions, observation)	"observation, sharing my own personal MHI and occasionally asking"	13%	16%	12%
Ask about student's family and background	"Ask about their background, what makes them the person they are"	8%	16%	4%
Sharing mental health resources	"Just by talking and informing of all of our resources here."	8%	8%	8%

*Note. Percentages* vary due to missingness. Percentages do not sum to 100 because comments could mention more than one theme. Themes mentioned by fewer than 5% of respondents are not included.

## Discussion

This study explored college coaches' perceptions of prospective student-athletes with MHI. Inconsistent with our expectations, the findings suggest student-athletes with MHI are rated as less problematic and more worthy of scholarship support than those without MHI. Some evidence of stigma was found, as student-athletes

with MHI were rated as less valuable, less likable, less reliable, less trustworthy, and less likely to perform under pressure than those without MHI. Although, these comparisons did not meet conventional thresholds for statistical significance after adjusting for multiple pairwise comparisons.

Our findings regarding potentially poorer judgments of students with MHI are consistent with Goffman's Stigma Theory (1963), suggesting mental health is viewed as a stigma that has negative implications for student-athletes with MHI. Considering the number of young people, college-aged athletes included, who are experiencing MHI, these findings are troubling. Across almost 400 campuses nationwide, 60% of students met the criteria for having at least one mental health problem (Lipson et al., 2022), and another national survey found almost 75% of students reported moderate to severe psychological distress (American College Health Association, 2021). Although college students have previously been hesitant to discuss or disclose mental issues (NCAA, 2019; Velasco, 2017), post-COVID-19 research suggests young people now feel more comfortable sharing their MHI (Cain Miller, 2021; Gallup, 2021). Mental health is widespread, and student-athletes are feeling more open about discussing their MHI; yet, this study provides preliminary evidence that they may be stigmatized for doing so. Increased disclosure, coupled with the mental health stigma demonstrated in our research, suggests a paradox: student-athletes who disclose their MHI could get professional help and valuable support, but it may be at the cost of jeopardizing their value. This is a problem, and one that Hilliard et al. (2022) suggest may be improved by reducing public stigma and self-stigma, specifically through (1) exposing college student-athletes to people who seek mental health support, and (2) increased education for administrators and coaches.

In terms of college athletics, the current results suggest more research is needed to understand how coaches make decisions about student-athletes when they have access to their mental health histories. Such findings align with prior research showing coaches play a critical role in supporting student-athletes as a whole person in and outside of sport (Castaldelli-Maia, 2019). Our study supports the notion that student-athletes may face increased pressure to be, or appear to be, psychologically healthy due to coaches' perceptions just as Bauman et al. (2016) found. Disclosing MHI can lead to perceptions of poorer performance and lower value to the team (Mertz et al., 2022), as well as concerns about the potential negative effects of psychiatric medication on athletic performance (NCAA, 2023a). These factors may create additional stress, pressure, and isolation for student-athletes.

Although some factors, such as medication side effects, are less adaptable, educating coaches offers a tangible and impactful way to reduce stressors and enhance support for student-athletes. The NCAA implemented mental health education modules for coaches (NCAA, 2016), intending to promote mental health help-seeking behaviors; however, the current study results show coaches rarely mention mental health resources when a student-athlete expressed MHI in the recruiting process. Despite low resource sharing, almost half of the coaches tried to get mental health information when the recruit had MHI, using methods such as indirect questions, asking other coaches, asking about challenges, character, and

maturity. These findings are consistent with Eckenrod et al. (2023), suggesting there may be confusion between mental performance and mental health. The combination of negative responses due to mental health stigma in student-athletes, the overlapping identities of mental performance and mental health, and the fear of being viewed as a poor performer add to our understanding of the low percentage of student-athletes who seek mental health support (NCAA, 2023a).

Contrary to our hypothesis, student-athletes with MHI were rated significantly more worthy of scholarship and significantly less problematic. Although these results contradict our initial hypothesis, there are several explanations for why stigma did not manifest in negative assessments of scholarship worthiness and on the problematic scale. These results could be attributed to the increased visibility of high-profile professional athletes with MHI (McDowell, 2021) and ongoing education initiatives on MHI for college coaches (NCAA, 2023b). Increased awareness and education about MHI may mean the stigmatization of scholarship worthiness has improved, with coaches more willing to support athletes with MHI. However, this study only surveys 155 college coaches covering 19 sports (campus count not collected to preserve anonymity). Due to the disparity in mental health funding among universities (Beebe & Petrie 2024), it cannot be assumed destigmatization occurs across the entire NCAA community.

Furthermore, the result of student-athletes with MHI as less problematic is intriguing and can be attributed to social desirability bias (Edwards et al., 1962). This result adds to the credibility of educational programs implemented by the NCAA (NCAA, 2016), suggesting coaches are aware that labeling an athlete as problematic is discriminatory and wrong. Furthermore, disclosing MHI could be perceived as demonstrating responsibility and self-awareness, qualities associated with effective self-management and distinctly different from those attributed to problematic athletes. This perception might lead coaches to believe there are more defined pathways for supporting student-athletes with MHI using mental health resources informed by NCAA education (NCAA, 2016). Conversely, the path may seem less clear for athletes without MHI.

#### **Implications**

The current study provides several implications for researchers and practitioners focused on reducing mental health stigma for student-athletes. Although protecting and enhancing student-athlete mental health is a central initiative in the NCAA, this study suggests that additional focus must be given to the unconscious or conscious biases that coaches possess, especially when they are recruiting an athlete with MHI. Reducing mental health stigma should go beyond the addition of resources and advocating disclosure; efforts should aim to include coach education and training on how to interact with a student-athlete with MHI. Ensuring coaches understand the biases they hold when interacting with athletes who disclosed MHI is an important first step to addressing the problem, but more research is needed to curate an effective training program for coaches. Though not exhaustive, topics such as myths about mental health in athletes, conscious and unconscious biases, recruiting, onboarding,

disclosure, and discrimination should be included in coach training. Ultimately, researchers and practitioners alike must design a model where disclosure leads to positive support for student-athletes to help create safe spaces to obtain mental health care without experiencing negative consequences from college coaches.

The current study has important practical implications for training college coaches to help reduce mental health stigma. In this study, we asked college coaches if and how they seek information about student-athletes' mental health during recruitment. Results showed inconsistency in how mental health information is requested, with the most common themes found to be: asking student-athletes directly, reading between the lines, asking the student-athlete's connections (i.e., coaches), and offering professional resources on campus (See Table 4 for more information). It is not clear what questions college coaches are directly asking, and it is problematic that college coaches are reading between the lines by 'observing' and 'getting a feel' for recruits as their method of assessing MHI.

In an effort to increase college coaches' mental health literacy and reduce the stigma surrounding treatment-seeking behavior, the NCAA presented coaches with an online educational module, entitled 'Supporting Student-Athlete Mental Wellness' (NCAA, 2016). Although this module represents an effort in training college coaches, one-fifth of coaches did not find it useful, and stated that it lacked direct guidance on how to, or whether to, address MHI in the recruiting process (Kroshus et al., 2019). This module may be improved by giving college coaches direct guidance on navigating mental health conversations in the recruiting process. Athletic departments should consider how that under the Americans with Disabilities Act (ADA) (U.S. Department of Justice Civil Rights Division, 2024), employers are prohibited from asking questions about MHI during job interviews; companies are monitored by HR to ensure recruiting procedures follow this policy. Evidently, this policy does not apply to college coaches because student-athletes are not currently considered employees; future NCAA education should establish policies to protect student-athletes, just as all employers are protected all around the United States. College coaches and athletic departments should be safe spaces to talk openly about mental health, educate themselves and others, be conscious of language, encourage equality between physical and MHI, show compassion for those with MHI, choose empowerment over shame, and be honest about treatment (Greenstein, 2017). Again, more research is needed on how this information can be implemented into effective training modules with clear take-away strategies for coaches.

#### **Limitations and Future Research**

As with any study, there are some limitations to the current research. In particular, there was some ambiguity in the study about whether the mental health issue was recognized by participants. As a manipulation check, we asked college coaches whether the student-athlete recruits in the voicemail transcript had MHI, with the possible responses 'Yes,' 'No,' and 'I do not remember' (see Footnote 1). In the control condition (no MHI cited), many of the participants in the study responded to the manipulation check with 'I do not remember.' They may have been

confused by the manipulation check question and selected 'I do not remember' to account for the possibility that they missed important information. Unfortunately, 29 college coaches in this condition did not pass the manipulation check. Because we think this was not a manipulation check failure but a problematic inclusion of item responses, we opted to include these college coaches in the dataset. The level of detail in the participants' open-ended responses regarding the information received about the student-athlete illustrates the level of attention and effort participants put into reviewing the profiles. To improve this in future studies, this manipulation check should remove the option to answer 'I do not remember' and only allow for the answer options "Yes" and "No".

Furthermore, in the qualitative analysis, we found college coaches wanted more information on the student-athlete than was provided on the voicemail transcript to make a judgment regarding evaluation and follow-up. This suggests the study can be made more realistic by providing a more detailed college coach report. We chose to make the college coach report neutral to avoid extraneous variables affecting the dependent variables. To gain a more accurate understanding of coaches' perceptions of student-athlete recruits, future studies might consider using a more extensive college coach report or a multi-step process that mimics the typical full college athlete recruitment process. Additionally, asking coaches to rank factors they perceive as important may provide valuable insight into the role of MHI in recruiting decisions. Nevertheless, Greenwald et al. (2003) indicates that subjective information can activate implicit biases that influence decision-making. Therefore, by using a voicemail with limited, subjective information, this study seeks to illustrate that mental health biases can impact recruiting decisions. Additionally, this study reflects the decision-making process college coaches may face when recruiting in high volumes with disorganized information (Palomba, 2024). Some athletes in the transfer portal are signed within 48 hours (Tsoukalas & Knowlton, 2024), compelling coaches to base their decisions on subjective information, such as a single voicemail from another coach, rather than undertaking the more time-consuming task of collecting objective data. This study has ecological validity (Schmuckler, 2001) as it replicates the reality that timely transfer portal decisions are sometimes based on subjective information.

The current research focused on the college coach discovering a student-athlete's mental health status by reading it on a voicemail transcript. Future research might also consider different ways in which this information is relayed from a student-athlete to a college coach. For instance, as disclosure of MHI is becoming more accepted and student-athletes are taking a more active stance in reducing mental health stigma, how might coaches view this information when it is received directly from the athlete? Further, the control condition did not explicitly provide mental health information; however, the absence of information does not necessarily mean participants did not believe the college student-athlete had a mental health issue in the control condition. More importantly, there may be many student-athletes who do not acknowledge they have a mental health issue. This is important to understand, particularly as the rate for disclosure is low and not well-understood among student-

athletes. These findings highlight the complexity of mental health in the student-athlete context; there are signs of reduced stigmatization and effective educational initiatives; however, this is only a starting point, and student-athletes still face the risk of stigmatization when engaging in conversation about MHI in the recruiting process.

#### Conclusion

This research has given us a greater understanding of the impact that disclosing a mental health issue has on a student-athlete's recruitability and value to a coach. Our findings support the presence of mental health stigma in the sporting world, and they expand on the literature by looking more closely at coaches' perceptions of student-athlete mental health. It is essential to use such research to guide future education and training, continue to make strides in promoting the disclosure of MHI, and encourage help-seeking behavior in student-athletes. Moreover, college coaches' negative bias toward student-athletes with MHI may represent a roadblock in destigmatizing mental health in college athletics and prevent student-athletes from seeking help when needed. In conclusion, though there are signs of destigmatization and effective education, it is essential for college coaches to understand high-performing athletes and MHI may coexist and a coach plays an integral role in supporting the mental health and help-seeking behavior of a student-athlete. Student-athletes will continue to be a vulnerable group until they feel they can get help for MHI without jeopardizing their place on a college athletic team.

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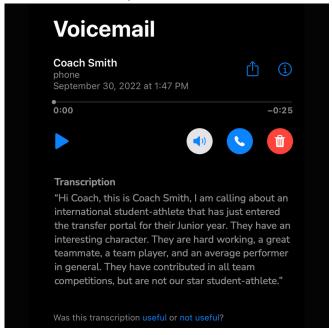
## **Appendix A**

#### **Coaches Report in Screenshot Format**

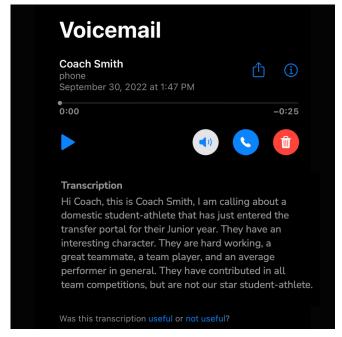
International Student-Athlete, Mental Health Issue Cited



#### International Student-Athlete, No Mental Health Issue Cited



#### Domestic Student-Athlete, Mental Health Issue Cited



#### Domestic Student-Athlete, No Mental Health Issue Cited



## Appendix B

#### **Qualtrics Survey: Methods for Recruiting Student-Athletes**

Consent Form **Study Title:** Methods for Recruiting Student-Athletes (IRB Protocol Number: IRB-FY2023-68)

**Principal Investigator:** Dr. Mikki Hebl, 6100 Main St. MS-25 Rice University, Houston, TX 77005, (832)541-3150, hebl@rice.edu; Other Investigator(s): Maria Budin, 6100 Main St. MS-25 Rice University, Houston, TX 77005, mb103@rice. edu, Dillon Stewart, 6100 Main St. MS-25 Rice University, Houston, TX 77005, ds69@rice.edu. This form gives you information about the study, including the purpose of the research and the risks and benefits of participating.

**Study Description.** This study is part of a senior honors thesis in which you will be asked to make decisions about recruiting an athlete in the transfer portal. The survey will take about 10-12 minutes to complete.

**Study Purpose.** The purpose of this study is to learn how different student-athlete background factors impact recruiting.

**Procedures.** Participants will be prompted to a consent page before viewing the survey. They will select they have read and understood the form and consent to this study before beginning the survey. If they select no they will be prompted away from the survey. The research team is using this method for confidentiality. In this study, you will view a voicemail left from a coach concerning one of their athletes in the transfer portal. You will then answer questions in relation to a voicemail shown.

**Participant Requirements.** You must be at least 18 years of age and must have had (or currently have) some experience as a collegiate-level coach.

Risks. There are no known risks with your participation.

**Benefits.** There are no personal benefits for participating, but the results may be used to improve recruiting practices in the future.

**Compensation & Costs.** You will receive a \$10 Amazon gift card for your earnest completion of the study.

**Ending Your Participation.** Your participation in this study is entirely voluntary. You are free to refuse to be in the study at any point in time.

**Confidentiality.** By participating, you understand and agree that the data and information gathered may be used by Rice University and published and/or disclosed by Rice University to others outside of Rice University. However, your own identity and individual data will not be made public.

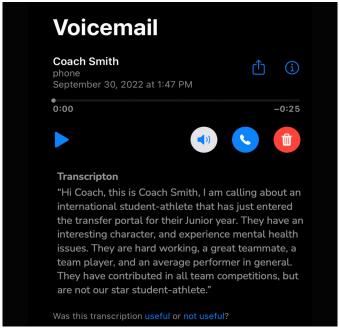
**Rights.** Your participation is voluntary. You are free to stop your participation at any point. Refusal to participate, withdrawing your consent, or discontinuing participation in the study will not result in any penalty or loss of benefits or rights to which you are otherwise entitled; note that you will not be eligible for the \$10. The Principal Investigator may remove you from the study for a number of reasons. In such an event, you will not suffer any penalty or loss of benefits or rights; you would get the \$10.

**Right to Ask Questions & Contact Information.** If you have questions regarding the study or have questions about your rights as a research participant, you are free to contact the primary investigator, Dr. Mikki Hebl (hebl@rice.edu) or an IRB administrator at Rice University. Email: irb@rice.edu or Telephone: 713-348-3586

By selecting "I consent (proceed to survey)" below, you agree to participate in this research study and certify that you are at least 18 years old and have collegiate level coaching experience.

_	el coaching experience.
	s, I consent. (1)
o No	, I do not consent. (2)
Q1.2 Whi	ch of the following jobs have you had in College Athletics? You may
select more th	an one.
	Head Coach (1)
	Assistant Coach (2)
	Volunteer Coach (3)
	Other (4)
	I have never been a coach (5)
Q2.1 Wha	at best describes your gender?
o Ma	le (1)
o Fer	nale (2)
o No:	n-binary (3)
o Pre	fer not to say (4)
o Oth	ner (5)
Q2.2 Wha	at is your race/ethnicity?
o Wh	ite (1)
o Bla	ck or African American (2)
o Am	nerican Indian or Alaska Native (3)
o Asi	an (4)
o Nat	tive Hawaiian or Pacific Islander (5)
o His	panic/Latino (6)
o Oth	er (7)
Q2.3 Wha	at is your nationality?
O3 1 I ha	ve coached in
-	NCAA Division I (1)
	NCAA Division II (2)
	NCAA Division III (3)
	NAIA (4)

- □ NJCAA I (5)□ NJCAA II (6)
- NJCAA III (7)
- Q3.2 In what region is your school located?
- Q3.3 What sport do/did you coach?
- Q3.4 How many years have you worked in College Athletics Coaching in total?
- Q3.5 What teams do/did you coach?
  - o Men's (1)
  - o Women's (2)
  - o Both Men's and Women's (3)
- Q4 You will now **read** a transcription of a recruiting voicemail. Once you have read the transcription, go to the next section and answer all questions. Click "I understand." to move on to the graphic.
  - o I understand. (1)
  - Q5.1 Please read the following voicemail transcription:



o I have read this graphic. (1)

#### Q6.1 Please read the following voicemail transcription:

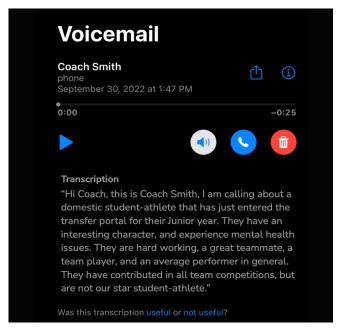


o I have read this graphic. (1)

#### Q7.1 Please read the following voicemail transcription:



- o I have read this graphic. (1)
- Q8.1 Please read the following voicemail transcription:



- o I have read this graphic. (1)
- Q9.1 Would you want to follow up with this student-athlete?
  - o Yes. (1)
  - o No. (2)
- Q9.3 Indicate the extent to which you agree or disagree with the following statements

	Strongly Disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
This student- athlete would be valuable to your program. (1)	0	0	0	0	0

This student- athlete seems likable. (2)	0	0	0	0	0
This student- athlete seems trustworthy. (3)	0	0	o	0	0
This student- athlete is worthy of continued scholarship support. (4)	0	0	0	0	0
This student- athlete would perform well under pressure. (5)	0	0	0	0	0
This student- athlete seems unreliable. (6)	0	0	0	0	0
This student- athlete seems problematic. (7)	0	0	0	0	0
This student- athlete seems weak. (8)	0	0	0	0	0

study

Q to ask	10.1 If you follow up with this student-athlete, what questions would you like them?
Q —	10.2 How would this student-athlete contribute to your program?
	11.2 Have you ever directly connected a student-athlete of yours with mental resources?  • Yes (1)
	o No (2)
	11.3 Have you ever had a student-athlete take a leave of absence due to mental issues?  • Yes (1) • No (2)
	11.4 During recruiting do you try to get information on the mental health of ident-athlete?  • Yes (1)  • No (2)
Q	11.45 If yes, how do you get this information?
Q	12.1 Is this student-athlete recruit in the voicemail domestic or international?  O Domestic (1)  International (2)  I do not remember (3)
Q issues'	12.2 Does this student-athlete recruit in the voicemail have mental health?
	<ul><li>Yes (1)</li><li>No (2)</li><li>I do not remember (3)</li></ul>
	13 Please insert the name and email of any other college coaches you think be willing to participate in this study.