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## Athlete Identity and Mental Health Among NCAA Division III Student-Athletes

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### ABSTRACT

*Student-athletes often identify with the athlete role and demonstrate high levels of athlete identity. High athlete identity leads to many unintended consequences such as low career maturity and difficulty adapting to a life beyond sport. Additionally, high athlete identity often leads to mental health concerns among the student-athlete population. Informed by self-categorization theory (Turner, 1982), the purpose of this study was to explore athlete identity and mental health among NCAA Division III student-athletes. The Athlete Identity Measurement Scale (AIMS) and The Depression Anxiety Stress Scales-21 were completed by 332 NCAA Division III student-athletes. The results demonstrated that Division III student-athletes did not identify highly with the athletic role and did not show concerning levels of anxiety, depression, and/or stress. Further, no relationship between athlete identity and mental health was found. This study strives to provide a keen insight into the athlete identity and mental health of Division III student-athletes in hopes of better understanding this population.*

Keywords: athlete identity, Division III, mental health, student-athletes

According to the National Collegiate Athletic Association (NCAA), “colleges and universities in Division III place highest priority on the overall quality of the educational experience and on the successful completion of all students’ academic programs” (2020a, p. ix). Division III institutions do not view sport as a means of entertainment (NCAA, 2020a), but rather focus on ensuring student-athletes have a well-rounded college experience (NCAA, 2020b). To this, the “Division III playing season and eligibility standards minimize conflicts between athletics and academics, allowing student-athletes to focus on their academic programs and the achievement of a degree” (NCAA, 2020b, p. 3).

It is important to remember that the “student-athlete experience varies considerably across institutions and NCAA competitive divisions” (Patton et al., 2016, p. 277). Given the uniqueness of the Division III (education first) philosophy (NCAA, 2020a; 2020b), student-athletes who participate at the Division III level may not receive any financial aid due to athletic ability (NCAA, 2020a). Division III is the largest NCAA division, with 195,290 student-athletes competing at the Division III level (NCAA, 2020b). At Division III institutions, student-athletes make up 25% (on average) of the student population (NCAA, 2020b). Although 445 institutions participate at the Division III level (NCAA, 2020b), this division largely has been ignored in the literature (Williams et al., 2020).

Student-athletes have been shown to spend a significant amount of time on sport-related activities (Navarro et al., 2020). Thus, this population often highly identifies with the athlete role and in essence demonstrates a high level of athlete identity (Brewer et al., 1993). High athlete identity leads to many unintended consequences such as low career maturity (Moiseichik et al., 2019) and difficulty adapting to a life beyond sport (Stokowski et al., 2019). Specifically, among student-athletes at the Division I level, high athlete identity often leads to mental health concerns (e.g.,

anxiety, depression, and stress) among the student-athlete population (Cox et al., 2017; Hatteberg, 2020; Humphrey et al., 2000; Yang et al., 2007).

Student-athletes often report increased levels of anxiety, depression, and stress (Cox et al., 2017; Storch et al., 2005; Yang et al., 2007). Due to high levels of athlete identity, student-athletes often lack help-seeking behaviors for mental health disorders (Wilkerson et al., 2020). Student-athletes also are unaware of the mental health services available to them (Moore, 2016). Therefore, the purpose of this study was to explore athlete identity and mental health among NCAA Division III student-athletes. Specifically, this study strived to address the following research question: Is there a significant relationship between athlete identity and mental health among Division III student-athletes?

### **Literature Review**

Although intercollegiate sport often is viewed as a violation of the amateurism ideal (Gurney et al., 2017), the Division III model is seen as the purest form of intercollegiate sport (Simon, 2010). At the Division III level, athletics and education are integrated (Cooper & Weight, 2012; Emerson et al., 2009). The Division III model strives to ensure student-athletes have a favorable collegiate experience in which athletics is an integral part of the educational process (Brand, 2006; Katz et al., 2015). Williams et al. (2010) expressed the importance of understanding the experience of Division III student-athletes, as the Division III level serves as an example of what intercollegiate athletics “should be” (Simon, 2010, p. 140). However, scholars fear the Division III model is threatened, or perhaps even has embraced, the Division I model (Katz et al., 2015; Simon, 2010; Sparvero & Warner, 2013; Sturm et al., 2011). Sparvero and Warner (2013) argue that the Division III model has succumbed to the commercialism and monetary values that have been embraced by Division I institutions. Therefore, the literature needs to expand to include a variety of scholarship dedicated specifically to Division III student-athletes.

### **Athlete Identity**

Brewer et al. (1993) defined athlete identity as “the degree to which an individual identifies with the athlete role” (p. 237). Outside factors (e.g., classification, coaches, family, sport, and teammates) often influence athlete identity (Woodruff & Schallert, 2008). The time demands of sport participation and the inability to develop a purpose-based identity through high-impact practices can result in a high athlete identity (Stokowski et al., 2019). Additionally, “The historic perception of the student-athlete has been that of a ‘dumb jock’ who is handed everything from grade to money on a silver platter” (Valentine & Taub, 1999, p. 164). Thus, the expectations that student-athletes must focus on their athletic endeavors may lead this population to exhibit a higher athlete identity.

The experiences of Division III student-athletes are unique (Patton et al., 2016). Not only does Division III not offer athletics-related financial aid, but the Division III philosophy revolves around ensuring a holistic positive college experience with an emphasis on education (NCAA, 2020a; 2020b). Schaeperkoetter et al. (2015) noted that student-athletes who participate at the Division III level are intrinsically motivated, partaking in athletics due to the love and pure enjoyment of sport participation. Division III student-athletes have reported a better overall college experience when compared to their Division I counterparts (Paule-Koba & Farr, 2013).

Sturm et al. (2011) examined the athletic identity of 188 Division I and Division III student-athletes. Although their results did not show any differences between student-athletes at the two divisions, gender was shown to be a significant variable. An investigation by Mignano et al. (2006) revealed that “student-athletes playing team sports at Division III attending women’s colleges were found to identify more strongly with the athlete role than those at Division III coeducational colleges” (p. 461). Griffith and Johnson’s (2002) study of Division I and III track and field student-athletes

discovered Division III student-athletes had a higher athletic identity when compared to their Division I peers. Huml's (2018) study of athlete identity across all three NCAA divisions found that NCAA affiliation appeared to impact athlete identity. Division I and II student-athletes were found to exhibit similar athlete identity scores, while Division III student-athletes exhibited lower athlete identity scores (Huml, 2018). As high athletic identity leads to lower educational outcomes (Beron & Piquero, 2016), Huml (2018) inferred that Division III student-athletes may exhibit a lower level of athlete identity due to the commitment of academic endeavors and career construction efforts.

### **Mental Health**

With the increased stress facing college students, mental disorders are appearing more frequently among this population (Mauere & Cramer Roh, 2015). According to the National Alliance on Mental Health Illnesses (Giliberti, 2015), 75% of all mental health illnesses begin by the age of 24. Unfortunately, 50% of student-athletes are so anxious they struggle in school (Cox, 2015). Such mental health concerns interfere with learning and ultimately decrease academic performance (McConville et al., 2017).

There is a plethora of research that speaks to the role demands of student-athletes and the increased risk of mental health problems (Cox et al., 2017; Hatteberg, 2020; Humphrey et al., 2000; Ryan et al., 2018) among this population. Simply put, the daily stress and difficulties of balancing both student and athlete expectations may induce feelings of low self-worth, which has been shown to exacerbate depressive symptoms (Hatteberg, 2020; Humphrey et al., 2000). Studies have demonstrated that more than a quarter of student-athletes exhibit signs of depression (Bullard, 2018; Cox et al., 2017; Wolanin et al., 2016; Yang et al., 2007), and 50% of student-athletes felt overwhelmed (Humphrey et al., 2000). Among Division I student-athletes, depression and anxiety have been found to be highly correlated (Davoren & Hwang, 2014; Yang et al., 2007). Five percent of student-athletes reported having suicidal isolations (Miller & Hoffman, 2009). Further, Cox (2015) discovered 25% of the student-athletes sampled did not know where to find mental health assistance and 45% reported having no mental health education. Although mental health awareness efforts have increased to combat mental health disorders among student-athletes (NCAA, 2016), the stigma of mental health lingers, perhaps discouraging student-athletes from receiving much-needed assistance (Sudano & Miles, 2017; Wilkerson et al., 2020). Although conversations surrounding mental health are increasing, the majority of research (Cox, 2015; Cox et al., 2017; Hatteberg, 2020; Wilkerson et al., 2020) is limited to student-athletes at Division I institutions (Williams et al., 2020).

According to Moore (2016), several variables may impact a student-athlete's risk for mental health disorders including age, race, gender, and NCAA affiliation (i.e., Division I, II, III). Yang et al. (2007) echoed this sentiment, believing that sub-groups of student-athletes should not be compared and warrant a separate investigation. Yet, the literature surrounding mental health and Division III student-athletes is scarce (Valster, 2020). Gross et al. (2017) study of Division III student-athletes did not discover any prevalence of depression. Ballard (2018) found that 4% of Division III student-athletes exhibited mild symptoms of depression and anxiety. Valster (2020) surveyed 104 student-athletes, and the results indicated that 10.7% of female student-athletes and 7.7% of male student-athletes at the Division III level reported symptoms of depression. In the same study, 2% of the sample were found to have symptoms of anxiety (Valster, 2020). Additionally, there were no significant mental health concerns reported related to the COVID-19 pandemic (Valster, 2020). Still, student-athletes reported services related to student-athlete well-being were almost nonexistent at the Division III level (Moore, 2016). Only 14.7% of Division III institutions employ a psychologist to work with the student-athlete population (Kroshus, 2016).

## **Theory**

Given the distinctive nature of the Division III philosophy (NCAA, 2020a; 2020b; Patton et al., 2016; Simon, 2010), Turner's (1982) self-categorization theory (SCT) was used to inform this study. SCT is an extension of Tajfel's (1978) social identity theory (SIT). Individual identities constantly change (Tajfel, 1978), and such identities strengthen when one joins a group. Group attachment has been shown to improve an individual's self-esteem and increase feelings of self-worth (Tajfel, 1978). Additionally, group attachment has been found to provide community and allow for conversation and ultimately acceptance (Branscombe & Wann, 1991; Brewer, 1979).

According to Turner (1982), "social identity is the cognitive mechanism that makes group behavior possible" (p. 21). Thus, SCT assists in illuminating individual behaviors as well as group behaviors and perceptions in a particular situation (Turner, 1982; 1991). SCT exists on a continuum of three core insights (Turner, 1982; 1991). The first core insight is that of stereotyping, which leads individuals to express themselves based on a specific social identity (Turner, 1982; 1991). For example, a Division III student-athlete is expected to view sport as a part of the educational model. The second part of SCT involves individuals viewing themselves in a category with others (Turner, 1982; 1991). Thus, regarding the student-athlete population, athletes may view themselves as an athlete, different from their non-athlete peers (Rees et al., 2015). As such, student-athletes may categorize themselves as student-athletes, regardless of sport affiliation. Lastly, SCT explains that individuals have a common identity and in essence strive to reach the same goals (Turner 1982; 1991). For example, student-athletes are expected to thrive in two distinct facets: academics and athletics. SCT commonly is used throughout sport scholarship to assist in explaining athletics-related experiences (Rees et al., 2015).

## **Method**

### **Participants and Design**

In the spring of 2021, NCAA Division III student-athletes were recruited to participate in the study through purposeful sampling. Upon receiving IRB approval, a Qualtrics survey was developed and an introductory email was sent to all 445 Division III athletic directors that explained the purpose of the study and asked that the survey link be forwarded to student-athletes at their respective institution for participation in the study. The survey remained open for six weeks, with reminder emails sent to athletic directors in weeks three and five.

In total, 332 NCAA Division III student-athletes completed the survey. The ages of the participants ranged from 18 to 25. Participant racial and ethnic identification included White (83.1%), Hispanic/Latino (7.4%), Black (5.1%), Asian (3.3%), American Indian/Alaska Native (0.9%), and Native Hawaiian/Pacific Islander (0.3%). Participants predominantly were female (68.4%), followed by male (30.7%), and non-binary/third gender (0.9%). Further, 11.1% of participants identified as members of the LGBTQ+ community. Relating to athletics, participants identified as college athletes for a variety of sports, including soccer (46), lacrosse (45), football (44), basketball (43), track and field (30), softball (29), swimming (24), field hockey (23), volleyball (23), baseball (19), cross country (11), tennis (11), golf (7), wrestling (4), dance (3), cheer (2), equestrian (2), and esports (1). Furthermore, 35 (10.5%) of the participants indicated competing in more than one college sport.

### **Measures**

After the initial question regarding voluntary consent, the survey began with general questions regarding descriptive information, such as age, race/ethnicity, gender, and sexual orientation. Next, the survey prompted participants to provide information about athletic participation, including which

sport they participated in and if they had redshirted. Participants then responded to previously validated scales designed to measure athlete identity and mental health.

Brewer et al. (1993) Athlete Identity Measurement Scale (AIMS) was used to evaluate the extent and exclusivity of participants' identification with the role of athlete. It has 10 items measured on a 7-point scale ranging from strongly disagree (1) to strongly agree (7). The higher one scores on the AIMS, the more one identifies with the athlete role. For example, participants were asked to indicate the extent to which they agree on statements such as "I consider myself an athlete" (Brewer et al., 1993). The highest one can score is 70 and the lowest is 10. The internal consistency coefficient for the overall scale in additional research utilizing the scale was strong, Cronbach's  $\alpha = .94$  (Beachy et al., 2018).

The Depression Anxiety Stress Scales-21 (DASS-21) provided a measure for participants' stress, anxiety, and depression (Asghari et al., 2008). This scale contains 21 total items divided evenly across three subscales for seven items per subscale. The three subscales represent stress, anxiety, and depression. Items referred to the past week and were measured with a 4-point Likert scale that ranged from "did not apply to me at all" (1) to "applied to me very much or all the time" (4). For example, participants were asked to indicate how often items such as "I found it hard to wind down" applied to them. The validity and reliability for the DASS-21 has been confirmed in both a clinical sample (Antony et al., 1998) and a non-clinical sample (Henry & Crawford, 2005).

### Data Analysis

SPSS statistical software was utilized for data analysis. First, descriptive statistics were performed to describe the participant characteristics. Next, Cronbach's (1951) alpha scores for the scales or subscales were calculated to measure internal consistency reliability. The research question was addressed using a Pearson correlation, which was conducted to examine the relationship between the AIMS and DASS-21 subscales. If the correlation had yielded a significant relationship between athlete identity and one or more of the DASS-21 subscales, a regression analysis would have been conducted to determine the proportion of variance in stress, anxiety, or depression accounted for by athlete identity.

### Results

This study examined NCAA Division III college athletes' mental health and athletic identity. Participant characteristics can be found in the participant and design portion of the method section. Incomplete responses were removed, which resulted in 332 completed questionnaires. Next, internal consistency reliability scores were analyzed for the AIMS and DASS-21 subscales. The AIMS yielded a strong rating of Cronbach's  $\alpha = .864$ , and scores for the DASS-21 subscales ranged between Cronbach's  $\alpha = .807$  and  $.900$ . As such, item interrelatedness was deemed adequate for both the AIMS and DASS-21.

Descriptive statistics were used to determine participants' self-perceptions regarding athlete identification and current mental health status. The average participant score on the AIMS was  $\bar{x} = 48.24$ , which equates to between "neither agree or disagree" and "agree somewhat" on the 7-point Likert scale. On all three of the DASS-21 subscales, participants averaged between "applied to me to some degree, or some of the time" and "applied to me to a considerable degree, or a good part of the time" on the 4-point Likert scale. Specifically, participants averaged the highest ( $\bar{x} = 1.90$ ) on the stress subscale, the second highest ( $\bar{x} = 1.66$ ) on the depression subscale, and the lowest ( $\bar{x} = 1.55$ ) on the anxiety subscale. For more information, see Table 1.



**Table 1**  
*Means, Standard Deviations, and Cronbach’s Alpha for College Athlete Participants*

	Mean	Standard Deviation	Number	Cronbach’s $\alpha$
Athlete Identity	48.244	9.919	332	.864
Stress	1.901	.575	332	.817
Anxiety	1.547	.530	332	.807
Depression	1.658	.627	332	.900

A Pearson correlation was used to examine the relationship between athlete identity using the AIMS score and mental health using the DASS-21. Results of the Pearson correlation indicated there was not a significant association between athlete identity and any of the mental health subscales. Specifically, the relationships are as follows: athlete identity and stress ( $r(330) = -.037, p = .499$ ), athlete identity and anxiety ( $r(330) = .012, p = .826$ ), and athlete identity and depression ( $r(330) = .049, p = .370$ ). While the relationship between the three DASS-21 subscales was not part of the research question, it is important to note all three yielded a significant correlation with one another. See Table 2 for more information. As athlete identity did not produce any indication of a significant relationship with any of the DASS-21 subscales, a regression analysis could not be completed to determine any potential explained variance.

**Table 2**  
*Correlations and Confidence Intervals for College Athlete Participants*

Variable	1	2	3
1. Athlete Identity	--		
2. Stress	-.037 [-.144, .071]		
3. Anxiety	.012 [-.096, .120]	.691* [.630, .743]	
4. Depression	.049 [-.059, .156]	.605* [.531, .668]	.656* [.589, .713]

*Note. Values in brackets represent each correlation’s 95% confidence interval. Confidence intervals represent the plausible range of population correlations that could have caused the sample correlation. \*indicates that  $p < .01$  (2-tailed).*

### Discussion

The purpose of this study was to explore athlete identity and mental health among NCAA Division III student-athletes. Given the unique experiences of Division III student-athletes (Patton et al., 2016) and the lack of literature on Division III student-athletes (Williams et al., 2020), this study strived to better understand the Division III student-athlete population. Past scholars (Moore, 2016; Williams et al., 2010; Yang et al., 2007) also suggested that researchers specifically focus on the

Division III population, as this population should not be compared to student-athletes participating at the Division I or Division II levels.

Given the sheer amount of time student-athletes invest in their sport (Navarro et al., 2020) and the lack of opportunities student-athletes have for career exploration (Coffin et al., 2021; Moiseichik et al., 2019), student-athletes have been shown to identify highly with the athletic role (Brewer et al., 1993). The sample of 332 Division III student-athletes has an average score of 48.24 out of 70. According to Brewer et al. (1993), those who highly identify as athletes would have close to 70, whereas those who do not identify as athletes score a 10. Overall, the participants fell between “neither agree or disagree” and “agree somewhat” regarding identifying with the athletic role.

Although scholars (Katz et al., 2015; Simon, 2010; Sturm et al., 2011) may feel that the Division III level is starting to mirror the athletic-focused nature of the Division I level, this study demonstrated that Division III student-athletes were not highly identified with the athletic role. Sturm et al. (2011) and Huml (2018) did not find Division III student-athletes to exhibit high levels of athlete identity; as such, the present study is in line with previous work. However, Griffith and Johnson’s (2002) study discovered that Division III track and field student-athletes related highly to the athletic role, as such, the present study did not share the same findings. The results of the AIMS scale (Brewer et al., 1993) are encouraging, as high athlete identity leads to many negative consequences, including an increase in mental health concerns (Cox et al., 2017; Storch et al., 2005; Yang et al., 2007).

According to the literature (Cox et al., 2017; Hatteberg, 2020; Humphrey et al., 2020; Ryan et al., 2018), student-athletes are at increased risk for mental health disorders. The participants in the present study did not show concerning signs of stress, anxiety, and depression. However, the participants did indicate some stress, anxiety, and depression were experienced throughout the week. Among the Division III student-athletes sampled, stress was the highest average and anxiety was the lowest.

Student-athletes reported feeling overwhelmed (Humphrey et al., 2000), and past literature (Bullard, 2018; Cox et al., 2017; Wolanin et al., 2016; Yang et al., 2007) has shown that more than a quarter of students-athletes have been found to be depressed. The results of the present study did not appear to be in line with previous work regarding the depression rates among the student-athlete population. It also should be noted that depression and anxiety often are associated (Davoren & Hwang, 2014; Yang et al., 2007); thus, the results in the present study appear to agree with this finding.

Past literature surrounding mental health and student-athletes has ignored the Division III population (Williams et al., 2020). Billard’s (2018) study found a small amount of Division III student-athletes experience mild anxiety and depression. Similarly, Valster (2020) found less than 11% of Division III student-athletes experienced depression, and the COVID-19 pandemic did not significantly impact the mental health of Division III student-athletes. As such, the present study appears to be in line with previous literature regarding mental health among the Division III student population.

Previous studies have demonstrated a connection between high athlete identity and mental health concerns (Cox et al., 2017; Hatteberg, 2020; Humphrey et al., 2020). Therefore, the research question explored the relationship between athlete identity and mental health among Division III student-athletes. The results of the present study did not find any significant relationship between athlete identity and mental health among the participants. Thus, although not a significant finding, such results should be viewed as positive and a contribution to the limited research surrounding Division III athletics.

Simon (2010) described the Division III model as an example of what college sport “should be” (p. 140). The Division III student-athletes that participated in this study did not show high levels of athlete identity, nor concerning levels of anxiety, depression, and/or stress. Thus, although the results of this study were not significant, the outcome of this study is extremely positive. Division III is a structured system that is a unique sub-set of the NCAA membership. Viewing the results of this study



through SCT (Turney, 1982), it would appear that the student-athletes who were sampled truly and collectively encompassed the Division III philosophy. Division III student-athletes did not buy into the “dumb jock” stereotype (Valentine & Taub, 1999), and in turn, did not show high levels of athlete identity. Additionally, given that a large amount of the student population at Division III institutions are student-athletes (NCAA, 2020b), the balanced experience emphasized on Division III campuses most likely is why participants did not demonstrate concerning levels of anxiety, depression, and/or stress.

### **Limitations**

Despite the authors’ efforts, the sample size was lower than desired. However, it should be recognized that the sample size in the present study was larger than previous studies (Billard, 2018; Gross et al., 2017; Valster, 2020) that sampled Division III student-athletes. Additionally, due to the sampling technique, a response rate could not be determined. The timing of the survey also could be viewed as a limitation. The survey was administered in the spring 2021 semester. Student-athletes preparing for the end of the academic year (e.g., finals) could have impacted their responses. Yet, this study did not find concerning rates of mental health disorders. Also, the fact that the COVID-19 pandemic caused the cancelation of sports, particularly at the Division III level, could have impacted the findings in the present study. Valster (2020) did not find COVID-19 significantly impacted the mental health of Division III athletes. We also recognize that this study lacked a complex statistical analysis; however, a regression could not be done without a significant correlation.

### **Future Research**

The lack of research on Division III student-athletes is concerning. Division III is the largest NCAA division with the most student-athletes participating (NCAA 2020a; 2020b); thus, Division III student-athletes no longer can be ignored by the literature. Research should continue to investigate athlete identity and mental health among the Division III student-athlete population. Perhaps future research should employ different instruments. Researchers should consider the Sport Identities Index (SII; Curry & Weaner, 1987) or the Sport Commitment Scale (SCS; Scanlan et al., 1993) when examining athlete identity. Regarding mental health, instruments such as the Health Anxiety Inventory (HAI; Salkovskis et al., 2002) or the Patient Health Questionnaire 9 (PHQ-9; Kroenke & Spitzer, 2002) should be employed. Moore (2016) found gender had an impact on the mental health of student-athletes; therefore, future work should examine demographic differences (e.g., gender, race, sport, sexual orientation) that may impact the mental health and athlete identity of Division III student-athletes. Additionally, future work is needed to better understand the relationship between mental health, athlete identity and the quality of life, academic success, and career maturity among student-athletes at the Division III level. Researchers should consider studies that are qualitative to better understand the lived experiences of this population regarding mental health and athlete identity. Lastly, the programming available at Division III institutions should be assessed and evaluated to understand the impact of such programs on the health and athlete identity of Division III student-athletes.

### **Conclusion**

Although Division III student-athletes are understudied, the experience of this population should not be discounted. The Division III level is the only division that strives to ensure a well-rounded educational experience. Thus, environments at the Division III level are spaces that encourage student-athletes to focus on pursuits well beyond the playing field. While many student-athletes struggle with high levels of athlete identity and mental health concerns, Division III student-athletes

do not appear to be in that same category. Therefore, instead of focusing on mimicking the Division I system, perhaps the Division III philosophy should be embraced and incorporated throughout its membership.

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