ACGME Symposium on Physician Well-Being: Are there Parallel Lessons from the NCAA Student-Athlete Model?

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No Conflict of Interest to Report





Sport Science Institute Mission

To promote and develop safety, excellence and wellness in college student-athletes, and to foster lifelong physical and mental development.





Strategic Priorities

- 1. Concussion.
- 2. Cardiac health.
- 3. Doping & recreational drug use.
- 4. Mental health.
- 5. Nutrition, sleep, & performance.
- 6. Overuse injuries & periodization.
- 7. Sexual assault & interpersonal violence.

Athletic healthcare administration.

Data analytics & informatics.

Mental Health Occurs on a Continuum







NCAA believes that ...

 Mental Health is not apart from, but rather a part of athlete health.

- To promote health is to enhance performance.
- It is important to understand sport-specific issues related to athlete health and safety, and engage a wide range of experts.





NCAA Mental Health Initiatives

- A call from the mother of a WKU men's basketball student-athlete who committed suicide in 2002 in his dorm room after experiencing a career ending injury.
- Led to a meeting in 2005 of 20 sport psychologists in their effort to create a new professional community.
- Resulted in the publication and dissemination of the Coaches Handbook:

Managing Student-Athletes'
Mental Health Issues





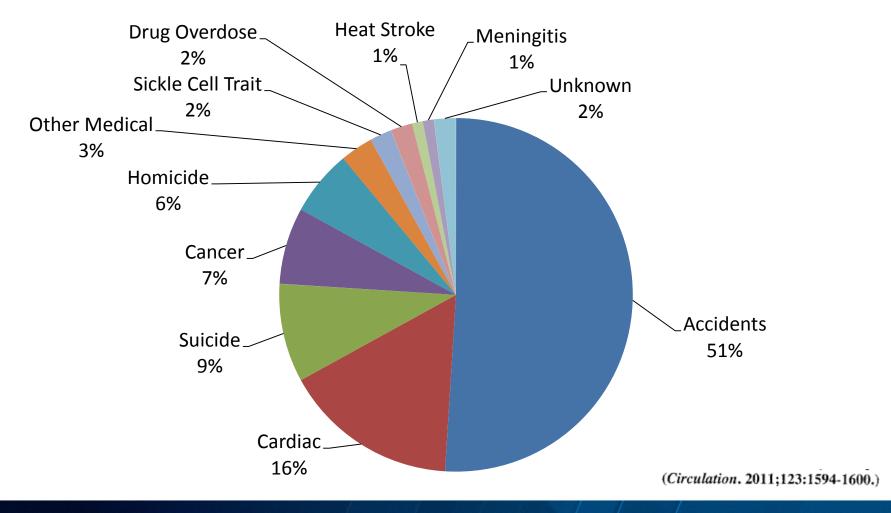


Athlete-Specific Concerns

- Culture of "toughness" can limit help seeking.
- Perception that "looking fit" or performing well means that the athlete is healthy.
- Pressure to perform.
- High visibility.
- Practice/travel = missed class = academic stress.
- Injury.
- Time demands (and compromised sleep).
- Other concerns . . .



Fatalities in NCAA Student-Athletes from 2004-2009





NCAA GOALS and SCORE Studies

Growth,

Opportunities,

Aspirations, and

Learning of

Students in College

Study of current student-athletes (Divisions I, II and III)

> Study of

College

Outcomes and

Recent

Experiences

Study of former student-athletes (primarily Division I entrants with a Division II version of SCORE recently completed)





GOALS Survey – Main Sections

- College athletics experience.
- College academic experience.
- College social experience.
- Recruitment / decision to attend current college.
- Health and well-being.
- Time commitments.
- Finances.
- Qualitative.





Time Demands





NCAA GOALS study— Open-ended question "If you could change one thing about your student-athlete experience, what would it be?"

Division I Males										
Track / XC	Basketball	Baseball	Soccer	Swimming	I	tball /FCS)				
22%	24%	23%	16%	13%	14%	21%				
3%	4%	3%	3%	6%	5%	7%				
2%	4%	4%	2%	1%	4%	1%				
13%	7%	8%	6%	9%	5%	11%				
4%	5%	7%	10%	18%	5%	3%				
20%	17%	27%	27%	25%	31%	24%				
4%	4%	1%	3%	1%	1%	2%				
2%	3%	3%	2%	4%	1%	2%				
9%	9%	3%	6%	12%	16%	10%				
4%	8%	7%	12%	1%	3%	4%				

NCAA GOALS study— Open-ended question "If you could change one thing about your student-athlete experience, what would it be?"

	Division I Males										
	Track / XC	Basketball	Baseball	Soccer	Swimming	Football (FBS/FCS)					
Nothing	22%	24%	23%	16%	13%	14%	21%				
School Choice	3%	4%	3%	3%	6%	5%	7%				
Major/classes	2%	4%	4%	2%	1%	4%	1%				
Work Ethic	13%	7%	8%	6%	9%	5%	11%				
Coaches	4%	5%	7%	10%	18%	5%	3%				
Time Demands	20%	17%	27%	27%	25%	31%	24%				
Health	4%	4%	1%	3%	1%	1%	2%				
Facilities	2%	3%	3%	2%	4%	1%	2%				
Finances	9%	9%	3%	6%	12%	16%	10%				
Success	4%	8%	7%	12%	1%	3%	4%				

NCAA GOALS study— Open-ended question "If you could change one thing about your student-athlete experience, what would it be?"

		Div	ision I Fema	ales		
	Track / XC	Basketball	Softball	Soccer	Swimming	Crew
Nothing	12%	13%	10%	12%	12%	15%
School Choice	2%	5%	5%	6%	1%	1%
Major/classes	1%	4%	2%	1%	2%	1%
Work Ethic	7%	5%	5%	8%	5%	4%
Coaches	16%	11%	16%	12%	16%	14%
Time Demands	23%	25%	36%	30%	31%	44%
Health	8%	5%	5%	4%	2%	1%
Facilities	1%	1%	1%	3%	2%	1%
Finances	8%	2%	3%	4%	3%	1%
Success	5%	10%	3%	6%	2%	2%

Average Hours Spent Per Week In-Season on Athletic Activities in 2010 (SA Self-Report)

Division I									
	Baseball	Men's Basketball	Foot	tball /FCS)	All Other Men's Sports	Women's Basketball	All Other Women's Sports		
Athletic Hrs	42.1	39.2	43.3	41.6	32.0	37.6	33.3		
	Division II								
Athletic Hrs	39.0	37.7	37	'.5	31.3	34.2	31.7		
Division III									
Athletic Hrs	34.8	30.8	33	3.1	29.2	29.8	28.9		

Note: <u>Green</u> = Decrease of 2+ hours on athletics from 2006;

Red = Increase of 2+ hours on athletics from 2006

Average Sum of Hours Spent Per Week In-Season on <u>Academic</u> Activities and <u>Athletic</u> Activities in 2010 (SA Self-Report)

Division I									
	Baseball	Men's Basketball	Football (FBS/FCS)		All Other Men's Sports	Women's Basketball	All Other Women's Sports		
Ave. Sum	73.7	76.5	81.3	79.8	68.0	76.5	73.4		
			Division	on II					
Ave. Sum	71.8	73.5	74.	2	67.6	71.6	73.1		
Division III									
Ave. Sum	70.4	65.6	71.	0	68.8	71.1	72.0		

Note: <u>Green</u> = 2+ hours less on academics/athletic sum vs. 2006;

Red = 2+ hours more on academics/athletic sum vs. 2006.

Percentage of Student-Athletes Reporting <u>As Much or More</u> <u>Time on Athletic Activities in Off-Season</u> than In-Season in 2010 (SA Self-Report)

Division I									
	Baseball	Men's Basketball	Football (FBS/FCS)		All Other Men's Sports	Women's Basketball	All Other Women's Sports		
% same/more	77%	69%	70%	70%	61%	46%	57%		
			Divis	ion II					
% same/more	79%	68%	70)%	63%	54%	55%		
Division III									
% same/more	55%	59%	62	2%	46%	38%	34%		

Note: <u>Green</u> = Decrease of 5% or more from 2006;

Red = Increase of 5% or more from 2006

If you had one extra hour each day, on what one activity (other than sleeping) would you most want to spend it? (2010 Self-Report)

Division I										
	Baseball	Men's Basketball		tball /FCS)	All Other Men's Sports	Women's Basketball	All Other Women's Sports			
Academics	11%	15%	15%	15%	19%	13%	21%			
Athletics	19%	27%	12%	14%	18%	8%	7%			
Extracurric. Activities	7%	3%	7%	6%	7%	6%	6%			
Family	11%	15%	12%	11%	7%	19%	11%			
Job	3%	3%	6%	8%	4%	4%	5%			
Socializing	24%	14%	20%	16%	25%	21%	26%			
Relaxing	25%	23%	29%	30%	21%	29%	25%			

Note: Green = Decrease of 5% or more from 2006;

Red = Increase of 5% or more from 2006

Bottom Line

Whether because of the structure of their college sport season or self-imposed pressure to develop/improve in their sport, student-athletes are generally under strong time pressures year-round.





Identity as Student vs. Athlete





How much do you agree or disagree that each of the following reasons contributed to your decision to attend your current college? (% Responding Agree or Strongly Agree)

	Division I										
	Baseball	Men's Basketball	Football	All Other Men's Sports	Women's Basketball	All Other Women's Sports					
Academic offerings or reputation	63%	65%	66%	69%	58%	75%					
Athletics participation	79%	83%	80%	82%	86%	86%					
Proximity to home	63%	56%	60%	46%	54%	49%					
Proximity to sig. other	25%	29%	33%	17%	19%	13%					
Social scene/friends	39%	40%	40%	31%	22%	25%					
Other peoples' expectations	42%	49%	51%	37%	39%	37%					

Note: Endorsement of top two scale points on 6-point scale

Academic versus Athletics Reasons Driving Decision to Attend this College.

(% Responding Agree or Strongly Agree)

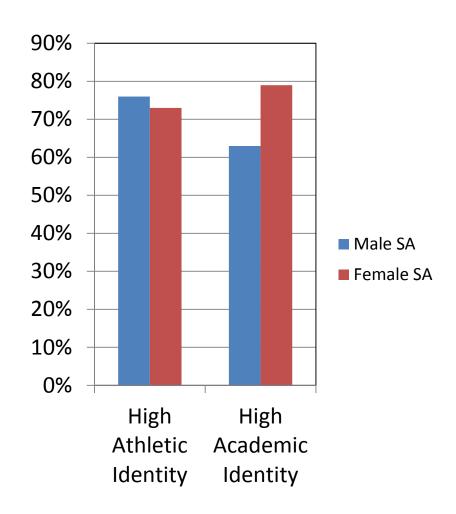
Division I									
	Baseball	Men's Basketball	Football	All Other Men's Sports	Women's Basketball	All Other Women's Sports			
Academics	63%	65%	66%	69%	58%	75%			
Athletics	79%	83%	80%	82%	86%	86%			
	Division II								
Academics	49%	59%	67%	61%	71%	70%			
Athletics	84%	83%	81%	81%	91%	83%			
			Division III						
Academics	62%	75%	78%	75%	84%	83%			
Athletics	76%	81%	85%	74%	82%	72%			

Note: Endorsement of top two scale points on 4-point scale

Academic and Athletic Identity

Outcomes for Males versus Females

- Similar percentage of males and females highly identify as athletes.
 Substantial gender difference on academic identity (79% versus 63%).
 This manifests in lower academic outcomes for males.
- Academic identity is related to college grades even after taking into account other academic variables (e.g. core grades and tests).
- Academic identity also related to higher likelihood of graduation and earning graduate degree by age 30.



NOTE: High identity defined as averaging 5 or higher on several items forming each identity composite (6-point scale).

Bottom Line

- Most NCAA student-athletes (across sport and level of competition) have strong identities as both athletes and students.
- This factors into college choice, pressure to perform well in both arenas and (potentially) conflict/stress reactions.
- Academic identity is key to positive academic/life outcomes.





Relationships with Coaches





How accurate were your initial expectations of the <u>athletics</u> experience at this college?

(% Responding Very Accurate or Mostly Accurate)

Division I									
	Baseball	Men's Basketball	Football	All Other Men's Sports	Women's Basketball	All Other Women's Sports			
N	80%	76%	72%	76%	60%	67%			
			Division II						
N	71%	70%	77%	78%	67%	67%			
	Division III								
N	68%	74%	78%	77%	70%	76%			

Note: Endorsement of top two scale points on 4-point scale

I would have attended this college even if a different coach was here.

(% Responding Agree or Strongly Agree)

	Division I									
	Baseball	Men's Basketball	Football	All Other Men's Sports	Women's Basketball	All Other Women's Sports				
N	52%	42%	59%	58%	43%	58%				
			Division II							
N	47%	41%	52%	59%	49%	59%				
	Division III									
N	61%	58%	60%	69%	65%	73%				

Note: Endorsement of top two scale points on 6-point scale

My head coach can be trusted

(% Responding Strongly Agree)

	Division I									
	Baseball	Men's Basketball	Football	All Other Men's Sports	Women's Basketball	All Other Women's Sports				
N	52%	50%	56%	51%	39%	48%				
			Division II							
N	49%	42%	63%	57%	44%	47%				
Division III										
N	55%	53%	66%	59%	47%	56%				

Note: Endorsement of top scale point on 5-point scale

My head coach puts me down in front of others

(% Responding Somewhat Agree or Strongly Agree)

Division I								
	Baseball	Men's Basketball	Football	All Other Men's Sports	Women's Basketball	All Other Women's Sports		
N	27%	31%	22%	20%	25%	21%		
Division II								
N	26%	34%	15%	15%	32%	17%		
Division III								
N	16%	26%	12%	16%	27%	14%		

Note: Endorsement of top two scale points on 5-point scale

Bottom Line

- For NCAA student-athletes, relationship with coach is related to college attendance, satisfaction with sport and college, and potentially sport/college retention.
- The impact of a coach on a student-athlete's psychological well-being can range from extremely positive to extremely negative.
- Can coaches / athletics administrators alone manage these SA issues when many tell us that they are having their own work-life balance issues?

Stress and Happiness





Self-Report of Current Overall Happiness of Division I Student-Athletes

	Football (FBS)	Football (FCS)	Men's Basketball	Men's Baseball	Men's Other	Women's Sports	
Current SAs (GOALS 2006)							
Very happy	31%	37%	38%	49%	40%	37%	
Former SAs (SCORE-94)							
Very happy	68%	68%	75%	76%	72%	74%	

All things considered, how happy are you today? (% Responding Very Happy)

Division I Males							
Track / XC	Basketball	Baseball	Soccer	Swimming	Football		
48%	43%	52%	44%	47%	38%		
Division I Females							
Track / XC	Basketball	Softball	Soccer	Swimming	Crew		
42%	38%	35%	36%	43%	39%		

Note: Endorsement of top scale point on 4-point scale. From GOALS 2010 study

Depression Model including Student-Athlete

 $(R^2=.369)$

	β	s. ß	OD	sig.
Academics	0.29	0.14	1.34	**
Career related issue	0.1	0.04	1.11	**
Death of family				
member/friend	0.12	0.04	1.13	**
Family problems	0.32	0.14	1.38	**
Intimate relationships	0.76	0.33	2.14	**
Other social				
relationships	0.59	0.25	1.80	**
Finances	-0.08	-0.03	0.92	**
Health problem of				
family member/	-0.06	-0.02	0.94	
Personal appearance	0.44	0.19	1.55	**
Personal health issue	0.23	0.1	1.26	**
Sleep difficulties	0.48	0.21	1.62	**
Other	0.7	0.3	2.01	**

	β	s. ß	OD	sig.
General health	-0.17	-0.07	0.84	**
Level of Stress	0.65	0.53	1.92	**
Non-prescription				
use of prescribed				
drugs	0.27	0.09	1.31	**
Illicit drug use	0.19	0.09	1.21	**
Sex	0.07	0.03	1.07	**
Race-Black	0.16	0.03	1.17	**
Race-Others	0.21	0.09	1.23	**
Sexual orientation	0.55	0.14	1.73	**
Transfer student	0.09	0.03	1.09	**
Student athlete	-0.08	-0.02	0.92	**

S. β: standardized coefficient

OD: Odd ratios ** (p<.01)



Anxiety Model including Student-Athlete

 $(R^2=.369)$

	β	s. ß	OD	sig.
Academics	0.5	0.25	1.65	**
Career related issue	0.23	0.09	1.26	**
Death of family				
member/friend	0.04	0.01	1.04	**
Family problems	0.23	0.1	1.26	**
Intimate relationships	0.37	0.17	1.45	**
Other social				
relationships	0.46	0.2	1.58	**
Finances	-0.01	-0.01	0.99	
Health problem of				
family member/	0.05	0.01	1.05	**
Personal appearance	0.35	0.14	1.42	**
Personal health issue	0.2	0.07	1.22	**
Sleep difficulties	0.46	0.19	1.58	**
Other	0.56	0.16	1.75	

	β	s. ß	OD	sig.
General health	-0.12	-0.09	0.89	**
Level of Stress	0.79	0.65	2.20	**
Non-prescription				
use of prescribed				
drugs	0.31	0.1	1.36	**
Illicit drug use	0.21	0.1	1.23	**
Sex	-0.37	-0.17	0.69	**
Race-Black	-0.45	-0.09	0.64	**
Race-Others	-0.11	-0.04	0.90	**
Sexual orientation	0.37	0.09	1.45	**
Transfer student	0.03	0.01	1.03	
Student athlete	-0.17	-0.05	0.84	**

S. β: standardized coefficient

OD: Odd ratios ** (p<.01)



Depression-NCHA

 Have you ever.....Felt so depressed that is was difficult to function (Yes, in last 12 months)

	STUDENT-ATHLETES	NON-ATHLETES	
Male	21% (1,623)	27%	
Female	28% (3,303)	33%	
White	24%	30%	
Black	26%	30%	
Other	29%	34%	

Anxiety- NCHA

Have you ever.....Felt overwhelming anxiety (Yes, in last 12 months)

	STUDENT-ATHLETES	NON-ATHLETES	
Male	31% (2,439)	40%	
Female	48% (5,747)	56%	
White	42%	52%	
Black	29%	41%	
Other	43%	50%	

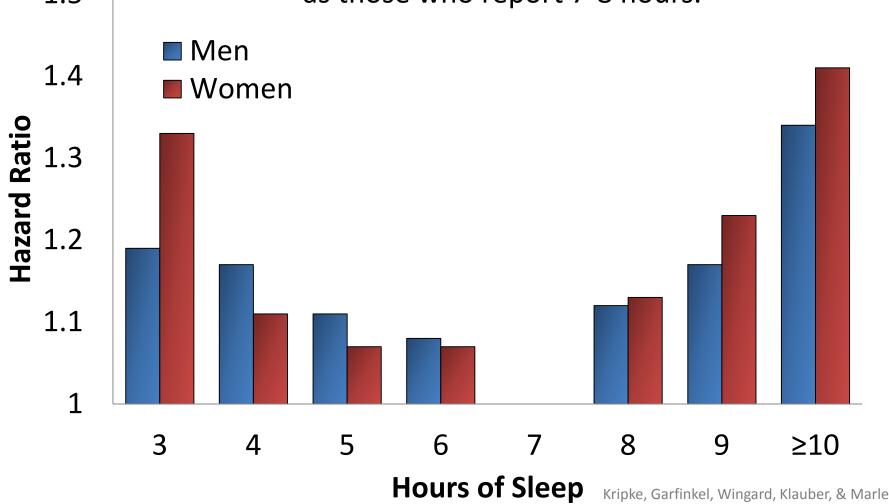
Sleep, Performance and Mortality



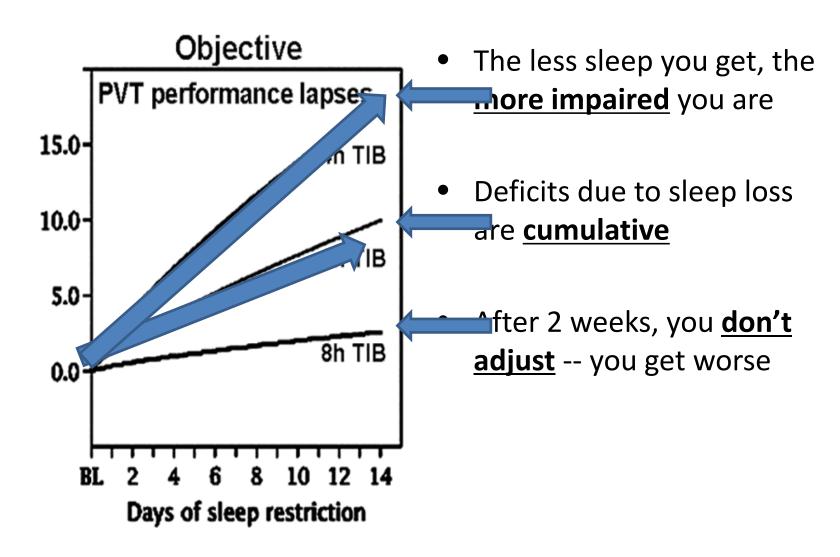


Mortality risk

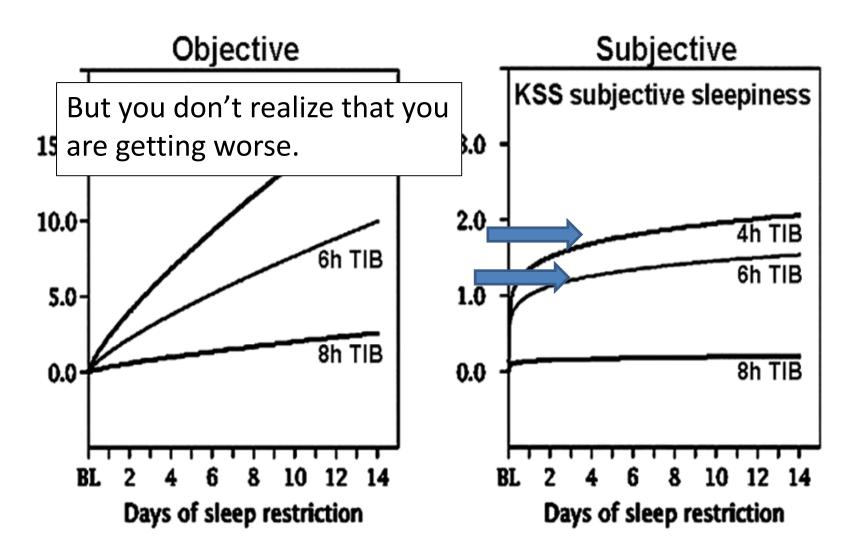
People who report short sleep or long sleep do not live as long as those who report 7-8 hours. 1.5



Sleep and performance



Sleep and performance



NCAA 2013 Substance Use Study

- Findings based on a spring 2013 NCAA-administered survey of approximately 21,000 student-athletes -- a representative sample from all three divisions.
- Conducted on a quadrennial basis since 1985; due to changes in the survey methodology, comparisons with current results are limited primarily to data from the 2005 and 2009 studies.
- One to three teams were invited to participate at each NCAA school; estimated 65% of schools participated.

Emerging / Re-emerging Drug Issues

- Alcohol Abuse.
- Marijuana.
- Prescription drugs.
 - Narcotics (opiates).
 - Stimulants.





When you drink alcohol, typically how many drinks do you have in one sitting? (of those who report alcohol use)

	Female		
	Division I	Division II	Division III
More than 4 drinks	31.9%	32.6%	37.8%
10+ drinks	2.4%	3.2%	3.3%
	Males		
	Division I	Division II	Division III
More than 5 drinks	39.6%	39.6%	50.4%
10+ drinks	15.5%	16.8%	20.4%



Prescription Drug Use 2013

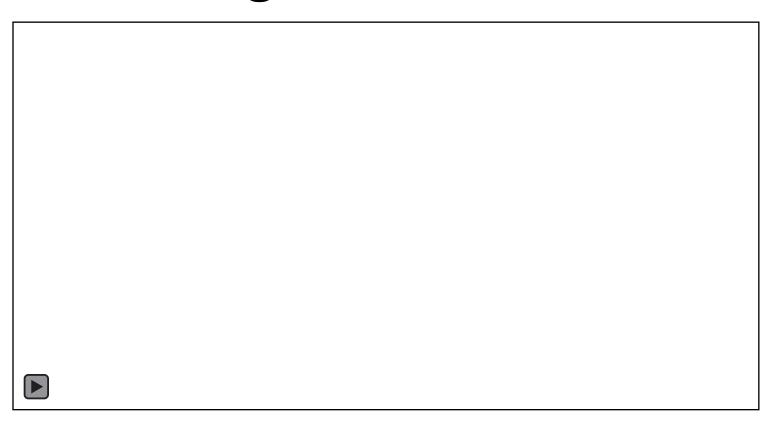
	Year	With Prescription	Without Prescription
ADHD	2009	4.5%	6.7%
Medication	2013	5.8%	8.8%
Pain Medication	2009	13.7%	5.1%
Faiii Medication	2013	18.0%	5.8%



NCAA Mental Health Task Force November 2013

- Clinicians, researchers, advocates, educators, athletics administrators, coaches and student-athletes.
- Address emotional health in our student-athletes.
- Advance recommendations and recommend research that support member institutions in meeting their membership obligations to provide a healthy and safe environment for student-athletes.

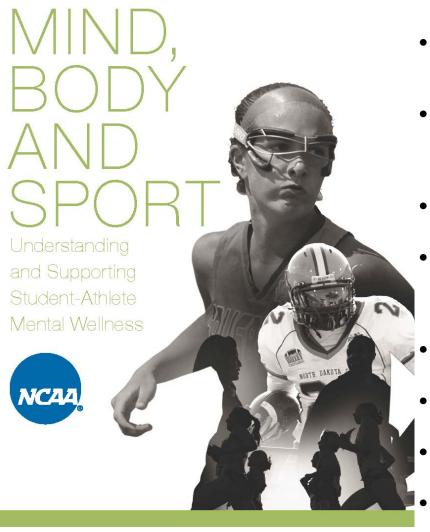
On Being a Student-Athlete



https://www.youtube.com/watch?v=bo5WWDk6SvE







- Personal narratives
- Experts on student-athlete depression, anxiety, eating disorders, substance abuse, gambling
- Stressors on student-athlete mental health: transitions, performance, injury, academic stress, coach relations
- Sexual assault, hazing bullying
- Cultural pressures: African-American studentathletes; Lesbian, Gay, Bisexual and Transgender student-athletes
- Roles & responsibilities of sports medicine staff
- Coaches' needs and roles
- Models of service
- NCAA resources and policies www.ncaa.org/mentalhealth



Inter-Association Best Practices

- Assure availability and accessibility of appropriate mental health care for all student-athletes.
- Create and maintain an environment within the athletics department that de-stigmatizes and promotes helpseeking.
- Develop with input from a range of stakeholder groups.
- Final rounds of additional review and endorsements from medical and higher education associations.



Reviewing/(?)Endorsing Organizations

- American Academy of Sleep Medicine
- American College of Sports Medicine (ACSM)
- American Medical Society for Sports Medicine (AMSSM)
- American Orthopedic Society for Sports Medicine (AOSSM)
- American Osteopathic Academy for Sports Medicine (AOASM)
- APA Division 47
- Association for Applied Sport Psychology
- Association of Black Psychologists
- Collegiate Athletic Trainers Society (CATS)
- Collegiate Clinical/Counseling Sport Psychology Association (CCSPA)
- International Society for Sport Psychiatry
- National Alliance for Mental Illness (NAMI)
- National Athletic Trainers Association (NATA)
- Higher Education Mental Health Alliance (HEMHA):
 - American Academy of Child & Adolescent Psychiatry (AACAP)
 - American College Counseling Association (ACCA)
 - American College Health Association (ACHA)
 - American College Personnel Association (ACPA)
 - American Psychiatric Association (APA)
 - American Psychological Association (APA)
 - Association for University and College Counseling Directors (AUCCCD)
 - The Jed Foundation
 - NASPA Student Affairs Administrators in Higher Education



Guideline Summary

- 1. Ensure that mental health care is provided by licensed practitioners qualified to provide mental health services.
- 2. Clarify and disseminate referral protocol.
- 3. Include mental health screening in PPEs.
- 4. Create and maintain a health-promoting environment that supports mental well-being and resilience.

 Mental health care should be provided by: clinical or counseling psychologist; psychiatrist; licensed clinical social worker; psychiatric mental health nurse; licensed professional counselor; primary care physicians with Certificates of Added Qualifications (CAQs) in Sports Medicine and/or competency-based training in mental health.

 Individual providing care should have cultural competency working with collegiate athletics.



- Additional considerations:
 - Financial support for dedicated service.
 - Physical location.
 - Unchallengeable autonomous authority and independence of decisions about mental health management and return-to-play decisions, and exemption from mandated reporting.

• Ensure that athletic departments have clarified their procedures for referring athletes with potential mental health concerns to appropriate personnel.





- Emergency action management plan:
 - Should address emergency mental health-related situations including:
 - Suicidal threat.
 - Homicidal threat.
 - Highly agitated or threatening behavior.
 - Acute psychosis or paranoia.
 - Acute delirium.





- Routine Mental Health Referrals
 - Provide written institutional procedures regarding appropriate referral of student-athletes to all stakeholders within the athletics department.
 - Identify a point person responsible for facilitating such referrals (e.g., ATC, team physician).

 Implement mental health screening as part of annual pre-participation exams.



- Determine screening approach in consultation with licensed mental health professional providing mental health care to studentathletes.
- Specify when and to whom symptomatic or at-risk student-athletes identified through this screening process will be referred.

 Create a health promoting environment that supports mental well-being and resilience.



- Coaches play a central role and should be:
 - Educated on on signs and symptoms of mental health disorders.
 - Trained in empathic response.
 - Encouraged to create a positive team culture.
 - Advised of department referral protocols.





Additional Considerations

Medication Management Plan

- Ensure that student-athletes with medication are being appropriately monitored.
- Require student-athletes to list all medications and supplements they are taking.
- Maintain on file documentation from personal physicians to demonstrate appropriate diagnostic evaluation and treatment protocols for medication use.



Additional Considerations

Financial Support

- Clarify institutional policies related to athletic financial awards and team engagement for student-athletes who are unable to continue sport participation, either temporarily or permanently, due to mental health considerations.
- Clarify institutional policies for financial support of student-athletes in need of extended outpatient treatment or inpatient care.



Additional Considerations

Transitional Care

- Establish a clear transition of care plan for athletes who are leaving the college sport environment.
- Identify
 - Who is responsible for initiating transition of care.
 - Who is responsible for providing athletes with information about community mental health resources.
 - Who is responsible for ensuring athletes have adequate medication, as necessary, until continuing care is established.
- Establish a transition plan for returning student-athletes who have been away from campus seeking care for mental health issues.

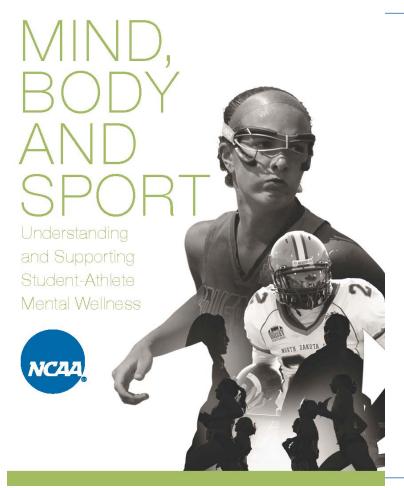


In Summary

- Mental Health is not apart from, but rather a part of athlete health.
- Athletic environments can support help-seeking and facilitate early identification, appropriate referral and care.
- Establishing protocols for care means more equitable care across sports and within institutions.
- Implementation of Best Practice Guidelines is an important step towards ensuring a model of care for student-athlete mental health.



NCAA Wellness Resources



www.ncaa.org/mentalhealth

- > APPLE Prevention Conferences
- > CHOICES Alcohol Education Grants
- ➤ Coaches Education Resources- on Hazing Prevention, Mental Health
- > myPlaybook online wellness curriculum
- ➤ Nutrition and Performance Resources
- ➤ Sports Medicine Handbook
- > SSI Newsletter
- ➤ Step UP! Bystander Intervention Training
- ➤ Violence Prevention Resources

www.ncaa.org/ssi









Helping is about 5 Separate Decisions

- 1. Notice the Event.
- 2. Interpret the Event as a Problem.
- 3. Assume Personal Responsibility.
- 4. Know How To Help.
- 5. Implement the Help.





Why Don't People Help?

- ▶ Because helping others is not just about one decision.
- Helping requires several sequential decisions to be made. Failure at any one of the steps will result in no help.
- ▶ Multiple factors can prevent the right decision from being made.





Reasons We Didn't Intervene

- Assumed it wasn't a problem.
 - Interpreting Event as Problem.
- It was none of my business.
 - Assuming Personal Responsibility.
- Thought someone else would do something.
 - Accept Personal Responsibility Diffusion of Responsibility.
- Believed others weren't bothered.
 - Conformity/Pluralistic Ignorance.
- Didn't know when/how to intervene.
 - Possess Skills to Help.
- Felt my safety would be at risk.
 - Costs/Rewards.





Thank you.