

Sports Psychiatry Portable Didactic Curriculum

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on behalf of the International Society for Sports Psychiatry

Original Curriculum Release Date: May 2018

Updated Curriculum Release Dates: April 2020, May 2022

Intended Learners:

- Psychiatry residents desiring an elective in sports psychiatry
- Psychiatry fellows desiring an elective in sports psychiatry
- Primary care (family medicine, internal medicine, pediatrics) residents desiring an elective in sports psychiatry
- Sports medicine fellows desiring an elective in sports psychiatry
- Senior medical students intending a career in psychiatry, sports medicine, primary care, or a related field and desiring an elective in sports psychiatry
- Attending psychiatrists desiring to further their education in sports psychiatry

Introduction:

Sports psychiatry is the sub-specialty within psychiatry largely focusing on diagnosis and treatment of psychiatric illness in athletes. While utilization of psychological approaches to enhance performance may also be part of the work of the sports psychiatrist, it tends to be less so as compared to addressing actual mental illness in this population. The work of sports psychiatry may also involve the use of exercise as a therapeutic or preventative intervention for mental illness. While the field has grown in recent years, most medical schools and residency/fellowship programs do not have curricular offerings dedicated to the topic, and there is little continuing medical education available on the topic for practicing psychiatrists. Moreover, with the population of sports psychiatrists relatively small, and with a relatively small research base, when health care providers do deliver psychiatric care to athletes, they may do so without a full understanding of the diagnostic and therapeutic issues unique to this population. Thus, this curriculum aims to enhance the knowledge base of physicians and medical students in the science of sports psychiatry, and to increase the skill with which psychiatric health care is provided to athlete populations.

Resources Required:

Faculty: Ideally, an on-site psychiatrist with expertise in sports psychiatry would supervise this elective experience. However, it is acknowledged that the field of sports psychiatry is relatively small, such that medical schools and residency programs may not have a faculty member/attending who identifies as an expert in sports psychiatry. In that case, a local faculty member with an interest in the field, even if little experience in it, could supervise the curriculum. A final option is that a faculty member/attending from an institution different than that at which the trainee taking the curriculum is enrolled could remotely supervise the didactic portion of the curriculum. In the latter case, there would be no direct clinical aspect to the rotation. In any case, ideally there would be regular (e.g., weekly) meetings between the learner and supervisor for discussion of readings and writing assignments. Of course, nothing is to stop an interested learner from completing this curriculum even if supervision/mentorship in any form cannot be arranged.

Patient population: A clinical population of athlete-patients could provide a clinical component to this elective. Care of such patients would be supervised by an on-site faculty member/attending. However, this elective can also be completed as simply a didactic/reading elective, in which the learner completes the “Readings and assignments” and “Final project” described below. If the latter, a faculty mentor/attending ideally should still be available to review assignments with the learner and to provide accountability in that manner.

Materials: The literature articles listed in the “Readings and assignments” section below are available on PubMed. **The International Society for Sports Psychiatry is not authorized to provide/disseminate these literature articles due to copyright limitations.** Possible avenues for obtaining these articles include

through an academic institution if the learner is affiliated with one, from the faculty supervisor of the learner's elective, from the authors of the articles, or via direct payment to the journals. Articles selected in each iteration of the curriculum are based on merit—neither the authors nor ISSP are compensated in any form.

Layout of the curriculum: The curriculum centers around a didactic/reading component (see “Readings and assignments” below). The rate with which the learner goes through the readings/assignments will depend on the time allotted for, and duration of, the elective or learning experience, as well as whether or not the learner has clinical requirements that also must be completed during the time of the elective. For example, if the learner is solely completing a didactic/reading elective during ½ day per week of protected time, they might complete 2 topic “blocks” per week (reading and accompanied assignment) and spend the remainder of the time during that ½ day each week working on their final project and meeting with the supervisor. If the learner is completing a sports psychiatry clinical experience along with the didactic/reading component, they might complete just 1 “block” per week and spend the remainder of the time during the elective each week seeing patients, working on their final project, and meeting with their supervisor. Depending on the duration of the elective, the learner and faculty supervisor might select an appropriate number of topics (those felt to be of greatest individual interest or of highest relevance) to be covered during that time, omitting the others. Detailed time keeping by early learners demonstrated that each topic (including time for reading the full article(s) and answering the questions thoroughly) takes between 30 minutes and 2.5 hours for the learner to complete (most in the 1-2 hour range).

Goals and Objectives of the curriculum:

Goals: By the end of this curriculum, learners will:

1. Understand the epidemiology of, risk factors for, and unique manifestations of a variety of psychiatric disorders and psychosocial stressors in athletes.
2. Compare and contrast treatments for psychiatric disorders in athletes versus treatments for psychiatric disorders in the general population.
3. Discuss individual level treatments as well as system wide interventions to address mental illness in athletes.
4. Develop familiarity with the medical literature on a variety of topics related to sports psychiatry.

Objectives:

Specific objectives are covered by the reading assignment questions. By the end of this curriculum, learners will be able to answer all of the questions posed in the reading assignments.

Final project: Learners completing this curriculum are to produce a scholarly product relevant to the field of sports psychiatry. The topic and format of the product is subject to approval by the supervising faculty member/attending, if applicable. Options include a manuscript (e.g., a standard research study, review paper, opinion piece in a journal, American Journal of Psychiatry Residents' Journal

article, etc.), poster presentation (local, regional, national, or international), a presentation, talk, or workshop (local, regional, national, or international), educational session (e.g., a one-hour didactic session for other learners in their academic program, or a Grand Rounds), or educational column (e.g., in one's state psychiatric association newsletter, the International Society for Sports Psychiatry newsletter, etc.). The exact project chosen depends on interest of the learner, duration of time available for the elective/curriculum completion, mentorship available at the time of the elective/curriculum completion, and scholarly opportunities at the time of the elective/curriculum completion.

Answer key: Upon a learner completing this curriculum, they may email Dr. Reardon (clreardon@wisc.edu) to request an answer key, if desired, for their own learning purposes. In making such a request, they should attest that they have completed their elective and should cc their attending supervisor (to ensure answers are not given out prior to completing the curriculum). If an attending supervisor desires the answer key prior to their learner completing the curriculum, they may email Dr. Reardon with that request. Please do not disseminate the answer key beyond the current learner and attending supervisor without permission from Dr. Reardon. **Note that if the learner is interested in submitting their completed curriculum materials to the International Society for Sports Psychiatry in order to be considered for a Certificate of Additional Training in Sports Psychiatry (see more information below), they cannot have received the answer key prior to their materials having been approved for a Certificate.**

International Society for Sports Psychiatry Certificate of Additional Training in Sports Psychiatry: Learners who satisfactorily complete all aspects of this curriculum may be eligible for consideration for an International Society for Sports Psychiatry Certificate of Additional Training in Sports Psychiatry. As with any credible Certificate program, not everyone who applies for a Certificate will be awarded one, as rigorous criteria are applied when evaluating submissions. **Note that if, at the time of release of this updated curriculum in 2022, you had already started work on the 2020 version of the curriculum in hopes of obtaining a Certificate of Additional Training in Sports Psychiatry, we will accept work on that version for the purposes of consideration for a Certificate.** We will no longer accept work on the 2018 version of the curriculum unless there are extenuating circumstances (in which case you must email Dr. Reardon at clreardon@wisc.edu for ISSP Education Committee consideration).

To be eligible for a Certificate, the following criteria must be met:

1. Must be a paid member in good standing of the ISSP
2. Must be a medical student, psychiatry resident, fellow in a psychiatry subspecialty fellowship program, or a psychiatrist who has completed a psychiatry residency program

3. Must complete all readings and writing assignments as described in the curriculum. Writing assignment responses should be typed in a single file that is email-able (e.g., a single PDF or Word document).
4. Must complete a “final project” as described in the curriculum materials. Note that if you have completed a sports psychiatry project (such as having published a relevant journal or newsletter article or having given a relevant talk) within the last 2 years, then this may ‘count’ for final project completion, and can be submitted for consideration as such. Final steps that demonstrate project implementation must be completed (e.g., article must already have been submitted to a journal or newsletter, talk has actually already been given to a group, etc.). The project should take at least 2 hours to complete (and in most cases it will take more).
5. Must participate in some type of approved, interactive 1:1 or group mentorship or education. If you are a medical student, resident, or fellow completing this curriculum as part of an official elective at your institution, this requirement is met IF your institution provides a mentor/instructor with whom you will have at least one 30-60 minute individual or group conversation to review your curriculum answers and final project as part of the elective. Another option for meeting this requirement is to have at least one 30-60 minute mentorship conversation with someone else who has already received the ISSP Certificate of Additional Training in Sports Psychiatry. A final option is participation in at least 1 interactive ISSP workshop as follows: *The ISSP has an expert led educational/workshop model allowing for immediate access to collaboration, engagement, and networking. This is a monthly ISSP live interactive virtual educational session. Each session will be approximately 1 hour in duration and will occur on various days of the week and various times given our worldwide membership. Topics will include practice development, practice growth, working with youth athletes, working with professional athletes, sports psychiatry research, the ISSP certificate program as well as other specific topics such as sleep, doping, concussion, pharmacology, etc. To participate in the program and receive a zoom link, you will need to email the mentorship chair, Dr. Alex Strauss (alexstraussmd@gmail.com) your CV, a signed mentorship agreement (Dr. Strauss will provide this to you by request), and proof of active ISSP membership. All expert session leaders will be seasoned Sports Mental Health Experts. Attendance at these virtual sessions will be tracked, and feedback questionnaires will be required from both the attendees as well as the expert clinicians. Consideration may be given to highly engaged mentees to further their training with more specific mentorship in the future.*
6. Once all above requirements are met, email to the Chair of the ISSP Education Committee, Claudia Reardon, MD (clareardon@wisc.edu), the following:
 - Attestation that you are a paid member in good standing of the ISSP
 - Attestation that you are a medical student, psychiatry resident, fellow in a psychiatry subspecialty fellowship program, or a psychiatrist who has completed a psychiatry residency program
 - Your completed ISSP curriculum answers

- Your completed final project and evidence of its implementation in some venue
 - Details of how/when/with whom the mentorship requirement (#5 above) was met
7. The ISSP Education Committee will review all items in #6 above. Satisfactory completion of the curriculum will require the following:
- Correct and reasonable answers to ALL questions in the ISSP curriculum. The ISSP Education Committee will use our official answer key to make this determination. If any of your answers from 5 or fewer topic areas are incorrect or unreasonable, you will be provided the opportunity to make revisions with the Committee's indication to you as to which questions specifically need correction. If answers to questions within more than 5 topic areas are incorrect or unreasonable, you will not be eligible for consideration for a Certificate for at least 1 year from the date of submission of your final answers. This is because the Committee is very busy reviewing curriculum submissions, and we want applicants to be encouraged to put forth their best effort on their first attempt such that we can prioritize review of first attempts.
 - Completion of an acceptable final project. If the project is deemed unacceptable either because final steps have not been taken, it did not appear to require at least 2 hours to complete, it is factually inaccurate, it is otherwise low quality, or there is anything about it that is contrary to the core values of the ISSP as described on the ISSP website (<https://sportspsychiatry.org/about-ISSP>), you will be provided with the opportunity to make appropriate revisions or to complete a different project.
 - Confirmation that the membership, professional role, and mentorship requirements are met

If completion of the curriculum is deemed satisfactory:

- An electronic ISSP Certificate of Additional Training in Sports Psychiatry will be emailed to the member. Printing and mailing of hard copy certificates is not possible.
- The member may list "International Society for Sports Psychiatry Certificate of Additional Training in Sports Psychiatry" on their CV or other personal/professional material. Note that by issuing such a certificate, the ISSP is not attesting to any degree of competence in the field of sports psychiatry; the organization is simply confirming that additional education has been satisfactorily undertaken in accordance with our requirements.
- You will be acknowledged as a new Certificate holder at the next annual ISSP Business Meeting and Scientific Session.

Evaluation of the curriculum by learners and by (if applicable) attending supervisors: When you have completed the sports psychiatry curriculum, the learner and (if applicable) attending supervisor are asked to please complete anonymous, approximately 5-minute, evaluations of the curriculum. These will help shape future iterations of the curriculum. Curriculum authors will not have access to survey results in batches of fewer than 5 responses, to ensure anonymity. The links to the surveys are as follows:

Learner survey: https://uwmadison.co1.qualtrics.com/jfe/form/SV_cSkILWffb7RIJj

Attending supervisor survey (if applicable):

https://uwmadison.co1.qualtrics.com/jfe/form/SV_dgqInTEZhJDcvZP

Readings and assignments:

Block #	Topic	Reading/assignment
1	The field of sports psychiatry	<p><u>Reading 1:</u> Begel D. An overview of sport psychiatry. American Journal of Psychiatry 1992;149:606-614.</p> <p><u>Writing assignment 1:</u></p> <ul style="list-style-type: none"> • According to this classic article written by the founder of sports psychiatry as a field, what is the primary role of the sports psychiatrist? Based on information you can find in this article or elsewhere, how does this differ from the typical role of the sports psychologist? • Speculate at least one reason why sports psychology as a field might be more developed than sports psychiatry. <p><u>Reading 2:</u> Reardon CL, Hainline B, Aron CM, et al. Mental health in elite athletes: International Olympic Committee consensus</p>

statement (2019). British Journal of Sports Medicine 2019;53:667-699.

Writing assignment 2:

- According to the article, list 4 reasons why reporting prevalence of mental health symptoms and disorders in elite athletes compared with that in the general population is particularly difficult.
- In order to have a “big picture” appreciation of mental health in athletes, it can be helpful to have a ready ability to delineate those mental health symptoms/disorders that appear relatively more common in athletes, those that appear equally common, and those that appear relatively less common compared to the general population. Thus, according to the article, which included a comprehensive review of the world’s literature, describe whether elite athletes (or certain subgroups of elite athletes) appear to have lower, equal, or higher prevalence of the following conditions (or whether research is insufficient to draw any conclusions):
 - sleep disorders and sleep concerns

		<ul style="list-style-type: none"> ○ major depressive disorder and depression symptoms ○ suicide ○ anxiety and related disorders ○ post-traumatic stress disorder and other trauma-related disorders ○ eating disorders ○ attention-deficit/hyperactivity disorder ○ bipolar and psychotic disorders ○ substance use and substance use disorders ○ gambling disorder
2	Depression in athletes	<p><u>Reading:</u> Edwards CD. Depression assessment: challenges and treatment strategies in the athlete. The Psychiatric Clinics of North America 2021;44(3):381-392.</p> <p><u>Writing assignment:</u></p> <ul style="list-style-type: none"> ● The article delineates 10 risk factors for depression in athletes. List them, and write at least 2 sentences for each, describing how it can contribute to depression in athletes. ● Find at least one separate research article published within the past 5 years that discusses differences in rates of depression between

		<p>individual and team sport athletes. Give the citation for the article, and write at least 4 sentences to summarize the findings and any hypotheses discussed in the article about why there might be such differences.</p>
3	Anxiety in athletes	<p><u>Reading:</u> Reardon CL, Gorczynski P, Hainline B, et al. Anxiety disorders in athletes. <i>Advances in Psychiatry and Behavioral Health</i> 2021;1(1):149-160.</p> <p><u>Writing assignment:</u></p> <ul style="list-style-type: none"> Imagine you have a patient who is a 19 year old collegiate swimmer who has developed competitive performance anxiety. She becomes very anxious leading up to all competitions to the point that she has feigned illnesses and injuries to avoid having to compete. When she does compete, she feels that her performance suffers related to the anxiety. This anxiety seemed to have started when she had a single poor performance much below that expected of her. She does not have significant anxiety outside of the athletic sphere. According to the article, list at least 3 ways you could distinguish this competitive performance anxiety from normal

		<p>competition-induced hyperarousal and from generalized anxiety disorder. How would you treat her anxiety in this situation? Comment on any psychotherapeutic, psychopharmacologic, or other approaches you might take.</p> <ul style="list-style-type: none"> • According to the article, describe why panic disorder sufferers may experience a worsening of symptoms during acute exercise. • Find 1 example from the lay press that illustrates what you would consider a superstitious ritual in an athlete (as opposed to actual obsessive-compulsive disorder). What psychological role do you suppose this ritual plays for the athletes?
4	Post-traumatic stress disorder and other trauma-related disorders in athletes	<p><u>Reading:</u> Aron CM, Harvey S, Hainline B, et al. Post-traumatic stress disorder (PTSD) and other trauma-related mental disorders in elite athletes: a narrative review. <i>British Journal of Sports Medicine</i> 2019;53(12):779-784.</p> <p><u>Writing assignment:</u></p> <ul style="list-style-type: none"> • According to the article, what is the relationship between degree of athlete identity and the risk of development of PTSD symptoms after an injury? Why do you think this is? • According to the article, list 3 psychological

		<p>strategies/defenses that athletes may employ after trauma that may mask trauma-related symptoms. Explain how each strategy/defense may be adaptive in sport in the short-term and also how it may impede long-term emotional recovery.</p> <ul style="list-style-type: none"> • You have a 25-year-old male professional track and field athlete who tripped over a hurdle in a major international competition, suffered a serious leg injury requiring several surgeries and a year of recovery, and has now completed all necessary rehabilitation to be able to fully return to sport. However, he is exhibiting PTSD symptoms and is having great difficulty returning to sport. When he tries to practice, he clears the hurdles with hesitation and does not get low enough to the hurdles. Referring to the assigned article, describe your general treatment approach, including psychotherapy and psychopharmacology as appropriate, and how each of those elements may be helpful in the athlete's recovery.
5	Eating disorders and other body image disorders in athletes	<p><u>Reading 1</u>: Wells KR, Jeacocke NA, Appaneal R, et al. The Australian Institute of Sport (AIS) and National Eating</p>

		<p>Disorders Collaboration (NEDC) position statement on disordered eating in high performance sport. Br J Sports Med 2020;54:1247-1258.</p> <p><u>Writing assignment 1:</u></p> <ul style="list-style-type: none">• Distinguish low energy availability, disordered eating, eating disorders and relative energy deficiency in sport (RED-S).• A 24-year-old professional female distance runner presents to her psychiatrist with concerns about anxiety. Through review of systems, it is discovered that she has not menstruated in 8 months. She is not using hormonal contraception and denies any chance of pregnancy. She points out that her former primary care physician observed that this was common in heavily exercising athletes, especially at times of peak training, and was not a cause of concern. Moreover, she notes that she menstruated monthly as expected when taking birth control pills prior to 8 months ago. Write 1 paragraph (at least 4 sentences) discussing the acceptability of this athlete's menstrual status
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		<p>(now and 8 months ago) and any potential relevance to disordered eating.</p> <ul style="list-style-type: none">• Body composition assessment is increasingly common in some sporting circles. Describe what this is and list at least 5 steps that should be taken to decrease the risk of such an assessment triggering disordered eating.• Find 1 research article on the female athlete triad and 1 research article on Relative Energy Deficiency in Sport (RED-S). Give the citations for the articles, and write 1 paragraph comparing and contrasting the concepts of RED-S and the female athlete triad. It is not universally accepted that 1 of these constructs is more valid than the other, but which do you find more compelling? <p><u>Reading 2:</u> Murray SB, Rieger E, Touyz SW, et al. Muscle dysmorphia and the DSM-V conundrum: where does it belong? A review paper. International Journal of Eating Disorders 2010;43:483-491.</p> <p><u>Writing assignment 2:</u></p> <ul style="list-style-type: none">• Muscle dysmorphia is not an official diagnosis included in the Diagnostic
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		<p>and Statistical Manual of Mental Disorders. However, according to the article, list the <i>proposed</i> diagnostic criteria for this condition.</p> <ul style="list-style-type: none"> • According to the article, describe ways in which muscle dysmorphia is <i>similar</i> to: body dysmorphic disorder; obsessive-compulsive disorder; and eating disorders.
6	Substance use disorders in athletes	<p><u>Reading:</u> McDuff D, Stull T, Castaldelli-Maia JM, et al. Recreational and ergogenic substance use and substance use disorders in elite athletes: a narrative review. British Journal of Sports Medicine 2019;53(12):779-784.</p> <p><u>Writing assignment:</u></p> <ul style="list-style-type: none"> • According to the article, list at least 5 reasons why athletes as a population may use substances. • According to the article, in general, how do use rates of most substances compare between elite athletes in most sports and the general population? • According to the article, what is the most widely used illicit substance in the general population and in elite athletes? Do elite athletes or members of the general population use this substance more? Find one website/article (does not have to be a

		<p>research article) describing a change or consideration of a change in use policy for this substance in a high level, elite, or professional sports league or organization. Provide the link to the website/article and write at least 3 sentences describing any arguments for or against a change in policy as described in the article. Finally, write at least 2 sentences describing your own thoughts as to if this substance should be considered a prohibited substance in high level, elite, or professional sports and why.</p>
7	Gambling disorder in athletes	<p><u>Reading 1:</u> Derevensky JL, McDuff D, Reardon CL, et al. Problem gambling and associated mental health concerns in elite athletes: a narrative review. British Journal of Sports Medicine 2019;53(12):761-766.</p> <p><u>Writing Assignment 1:</u></p> <ul style="list-style-type: none"> • According to the article, list at least 7 unique characteristics that make elite athletes (including both collegiate and non-collegiate elite athletes) more susceptible than the general population to development of gambling problems.

		<ul style="list-style-type: none"> • According to the article, list at least 5 different negative effects that problem/disordered gambling can have on an athlete’s mental health and ability to function. • The article mentions that gambling disorder is often referred to as a ‘hidden addiction’. Speculate on at least 2 reasons why this might be the case, i.e., why it can go undetected for long periods of time. <p><u>Reading 2:</u> Trends in NCAA student-athlete gambling behaviors and attitudes. Executive Summary. November 2017. Available at: https://ncaaorg.s3.amazonaws.com/research/wagering/2017RES_wageringexecutivesummary.pdf</p> <p><u>Writing Assignment 2:</u></p> <ul style="list-style-type: none"> • According to the article, write one paragraph (at least 4 sentences) describing the recommended elements of educational programming on gambling that an institution could develop for the purposes of protecting student-athlete well-being and protecting contest fairness.
8	Bipolar and psychotic disorders in athletes	<u>Reading:</u> Currie A, Gorczynski P, Rice SM, et al. Bipolar and

		<p>psychotic disorders in elite athletes: a narrative review. British Journal of Sports Medicine 2019;53(12):746-753.</p> <p><u>Writing assignment:</u></p> <ul style="list-style-type: none"> • According to the article, list 3 reasons why a diagnosis of bipolar disorder or a psychotic disorder may be more difficult to make in an elite athlete. • According to the article, describe at least one way in which exercise might help regulate mood in patients with bipolar disorder, and at least one way in which it might destabilize mood. Describe how different TYPES of sports might have different impact in this regard. • Do you think the above findings would be compelling enough to change your practice in any way when working with athletes who have bipolar disorder? Why or why not? If so, in what way(s)?
9	Attention-deficit/hyperactivity disorder in athletes	<p><u>Reading:</u> Han DH, McDuff D, Thompson D, Hitchcock ME, Reardon CL, Hainline, B. Attention-deficit/hyperactivity disorder in elite athletes: a narrative review. British Journal of Sports Medicine 2019;53(12):741-745.</p> <p><u>Writing assignment:</u></p>

		<ul style="list-style-type: none"> • According to the article, list at least 5 ways that ADHD may negatively affect sport performance in elite athletes, and at least 2 ways that ADHD may positively affect sport performance in elite athletes. • You are a sports psychiatrist asked to see a 25-year-old professional swimmer for diagnostic evaluation and treatment recommendations for inattentive symptoms that might represent ADHD. He has never received such a diagnosis. Drawing from the article, describe: how you would make a diagnosis of ADHD including any additional testing you would do; a treatment algorithm you would use if indeed you diagnosis ADHD (i.e., treatments you would try first and why, and next steps if your first line treatments fail); and any additional steps you would need to take prior to prescribing stimulants in this professional athlete.
10	Sleep in athletes	<p><u>Reading:</u> Halson SL. Stealing sleep: is sport or society to blame? British Journal of Sports Medicine 2016;5:381.</p> <p><u>Writing assignment:</u></p> <ul style="list-style-type: none"> • According to the article, list at least 5 reasons why

		<p>athletes may be at unique risk for sleep deprivation.</p> <ul style="list-style-type: none"> You are working in administrative leadership at a Division I college athletic department and have been put in charge of developing initiatives to improve overall sleep of the student-athlete population at your institution. Describe 2 initiatives you might undertake, and barriers that might exist to implementation of each one (total of at least 4 sentences for each initiative).
11	Suicide in athletes	<p><u>Reading:</u> Rao AL. Athletic suicide—separating fact from fiction and navigating the challenging road ahead. <i>Current Sports Medicine Reports</i> 2018;17(3):83-84.</p> <p><u>Writing assignment:</u></p> <ul style="list-style-type: none"> According to the article, describe whether suicide rates appear to be lower or higher in these populations of athletes relative to the general population: high school athletes; collegiate athletes; professional athletes. According to the article, list 3 hypotheses for how sport participation might be protective against suicide. Find 1 research article on the controversial topic of the relationship (or lack

		<p>thereof) between suicide and chronic traumatic encephalopathy in athletes. Give the citation for the article and write 1 paragraph (at least 4 sentences) describing any evidence from the article either supportive of or unsupportive of a relationship between suicide and chronic traumatic encephalopathy.</p>
12	Mental health impact of concussions in athletes: Part 1	<p><u>Reading:</u> Harmon KG, Clugston JR, Dec K, et al. American Medical Society for Sports Medicine position statement on concussion in sport. British Journal of Sports Medicine 2019;53:213-225.</p> <p><u>Writing assignment:</u></p> <ul style="list-style-type: none"> • According to the article, define sport-related concussion, including how it is related to the concept of mild traumatic brain injury (mTBI). • According to the article, list the 6 proposed overlapping clinical profiles of concussion in sport, 3 possible physical exam findings within each domain, and at least 2 targeted treatments within each domain. • According to the article, describe the typical timeframe of functional clinical recovery for younger athletes, older adolescents, and adults

		<p>suffering from sport-related concussion.</p> <ul style="list-style-type: none"> • According to the article, list 3 risk factors for prolonged recovery from sport-related concussion. • According to the article, describe the historic versus current recommendations (at least 1 sentence for each) for cognitive and physical rest after sport-related concussion.
13	Mental health impact of concussions in athletes: Part 2	<p><u>Reading:</u> Rice SM, Parker AG, Rosenbaum S, et al. Sport-related concussion and mental health outcomes in elite athletes: a systematic review. Sports Medicine 2018;48:447-465.</p> <p><u>Writing assignment:</u></p> <ul style="list-style-type: none"> • According to the article, describe the level of evidence (i.e., type of research studies that have been done to date, such as prospective, retrospective, case-controlled, etc.) and generally what that evidence shows for any association between sport-related concussion and depression, and between sport-related concussion and anxiety. • According to the article, describe a biopsychosocial model for negative outcomes in sport-related concussion (at least 4 sentences).

14	Relationship between injuries and mental illness	<p><u>Reading 1:</u> Putukian M. Chapter 4. How being injured affects mental health. In: Mind, Body, and Sport: Understanding and Supporting Student-Athlete Mental Wellness. NCAA. 2014. Available at: https://www.ncaa.org/sports/2014/11/5/mind-body-and-sport-how-being-injured-affects-mental-health.aspx</p> <p><u>Writing assignment 1:</u></p> <ul style="list-style-type: none"> • According to the article, describe how an eating disorder may result from an athletic injury. • According to the article, provide 3 reasons why being injured with a concussion is different from other injuries in how/why it may affect mental health. • According to the article, describe one potential negative impact of increased media attention on chronic traumatic encephalopathy among athletes. <p><u>Reading 2:</u> Psychological issues related to illness and injury in athletes and the team physician: a consensus statement-2016 update. Current Sports Medicine Reports 2017;16(3):189-201.</p> <p><u>Writing assignment 2:</u></p> <ul style="list-style-type: none"> • According to the article, describe at least 2 ways in which psychological
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		<p>stress may predispose to athletic injury.</p> <ul style="list-style-type: none"> • According to the article, list 3 prominent psychological factors that have been shown to be important in illness and injury treatment and outcomes. For each of these, explain the impact in 1-2 sentences. • According to the article, list 9 characteristics of poor progression of recovery from injury.
15	Medication use for psychiatric disorders in athletes	<p><u>Reading:</u> Reardon CL, Creado S. Psychiatric medication preferences of sports psychiatrists. <i>The Physician and Sportsmedicine</i> 2016;44(4):397-402.</p> <p><u>Writing assignment:</u></p> <ul style="list-style-type: none"> • According to the article, list 3 important variables to consider in prescribing psychiatric medications to athletes. • Considering the results described in the assigned reading, as well as your own clinical experiences with medications, what would be your first choice for a psychiatric medication for an athlete in each of the following categories: depression without anxiety and without bipolar spectrum disorder; generalized anxiety disorder; insomnia; ADHD; bipolar spectrum disorders; psychotic disorders? For

		<p>non-medical students only (this would be an advanced question for medical students): What would be your first choice for a psychiatric medication, and why, for an athlete in the following diagnostic categories not considered explicitly in this article: OCD; PTSD; panic disorder?</p> <ul style="list-style-type: none"> • How, if at all, do your first-line choices in all of these categories differ from your first-line choices for general, non-athlete patients? If there are differences, are they justifiable (in other words, do any differences suggest that we wouldn't be treating athletes "aggressively" enough with medication, or that we are too tolerant of side effects in non-athlete patients?)?
16	Psychotherapy for psychiatric disorders in athletes	<p><u>Reading:</u> Stillman MA, Glick ID, McDuff D, et al. Psychotherapy for mental health symptoms and disorders in elite athletes: a narrative review. British Journal of Sports Medicine 2019;53(12): 767-771.</p> <p><u>Writing assignment:</u></p> <ul style="list-style-type: none"> • According to the article, list at least 1 reason why each of the following types of psychotherapy, in certain circumstances, may be uniquely helpful and/or comfortable for

		<p>athlete-patients: cognitive behavioral therapy (CBT); motivational enhancement therapy (MET); couple/family psychotherapy; group psychotherapy.</p> <ul style="list-style-type: none"> • A 21-year-old female swimmer is referred to you for psychiatric assessment and treatment for symptoms of severe anxiety and possible eating disorder. You contact her to schedule an intake appointment and offer her a variety of time slots in which you see patients (8:30-4 pm, except for 12-1 for lunch break/meetings) and during which your college counseling center is open. However, the swimmer, who is in the midst of a very heavy swim practice schedule as she prepares for the Olympic Trials, says that it would be very difficult for her to see you during your open time slots, and she wonders if you could see her at 4 pm. How would you deal with this situation? What are the pros and cons to a variety of options for scheduling?
17	Exercise addiction	<p><u>Reading:</u> Freimuth M, Moniz S, Kim SR. Clarifying exercise addiction: differential diagnosis, co-occurring disorders, and phases of addiction.</p>

		<p>International Journal of Environmental Research and Public Health 2011;8:4069-4081.</p> <p><u>Writing assignment:</u></p> <ul style="list-style-type: none"> • According to the article, list 7 proposed criteria for exercise addiction that parallel DSM-5 criteria for substance use disorders. • According to the article, distinguish primary exercise addiction from secondary exercise addiction. • According to the article, list the 4 proposed phases of exercise addiction. Write one sentence to describe each phase (4 sentences total).
18	Harassment and abuse (non-accidental violence) in sport	<p><u>Reading:</u> Mountjoy M, Brackenridge C, Arrington M, et al. International Olympic Committee consensus statement: harassment and abuse (non-accidental violence) in sport. British Journal of Sports Medicine 2016;50:1019-1029.</p> <p><u>Writing assignment:</u></p> <ul style="list-style-type: none"> • According to the article: a) list at least 7 examples of psychological harassment and abuse in sport; and b) describe the “gateway” relationship of psychological harassment and abuse to sexual and physical abuse in sport. • According to the article, list at least 3 risk factors

		<p>for sexual abuse in sport. Additionally, list 3 situations that are NOT, on average, risk factors for sexual abuse in sport, despite presumed public perception to the contrary.</p> <ul style="list-style-type: none">• According to the article, list at least 3 forms of neglect in sport.• Describe the impact on victim-athletes of passive attitudes/non-intervention, denial, or silence by people of positions in power in sport (particularly bystanders, i.e., those who are witnessing or aware of non-accidental violence) when it comes to non-accidental violence in sport.• Imagine you are Director of Athlete Mental Health at a Division I University. You have been tasked with setting up a comprehensive program to address the topic of non-accidental violence in sport at your institution. Write one paragraph (at least 4 sentences) that describes: a) the role of any educational programming; and b) principles of a reporting protocol for athletes and bystanders who are experiencing or observing non-accidental violence in sport.
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19	Child and adolescent sports psychiatry: Part 1	<p><u>Reading:</u> Conant-Norville DO. Child and adolescent sports psychiatry in the US. International Review of Psychiatry 2016;28(6):556-563.</p> <p><u>Writing assignment:</u></p> <ul style="list-style-type: none"> • According to the article, define physical literacy, INCLUDING definitions of the 3 components of it. List at least 4 groups of youth who, under the current model of youth sports in the US, have insufficient opportunities for development of physical literacy. • According to the article, list 8 challenges, identified by the Aspen Institute’s Project Play workgroup, that limit youth sports involvement in the US. Imagine you are tasked with developing a summer youth sports program for 5-6 year olds in your community. Write one paragraph (at least 4 sentences) describing how you would structure the program, keeping in mind some of the 8 challenges you listed? • According to the article, distinguish “early specialization in sport” versus “sport sampling” in youth, and list at least 3 benefits of the latter.
20	Child and adolescent sports psychiatry: Part 2	<p><u>Reading:</u> Xanthopoulos MS, Benton T, Lewis J, et al. Mental health in the youth athlete.</p>

Current Psychiatry Reports
2020;22:63.

Writing assignment:

- According to the article, list at least 5 reasons why mental health symptoms or disorders in youth athletes may not be recognized or treated.
- According to the article, how do usage rates by young athletes for the following substances compare to usage rates in the general population of young people?: alcohol; cigarettes; smokeless tobacco; illicit substances.
- According to the article, list at least 4 intrinsic and 1 extrinsic factor that may contribute to overtraining and burnout in youth athletes. According to the article, describe how parents/caregivers can mitigate factors that contribute to overtraining/burnout.
- According to the article, explain why young athletes may underreport hazing in sport. Based on the article or other information, write at least 3 sentences to describe intervention(s) that may increase recognition of hazing in youth sport and that may help to address it when it happens.

21	Retirement in athletes	<p><u>Reading:</u> Knights S, Sherry E, Ruddock-Hudson M. Investigating elite end-of-athletic-career transition: A systematic review. Journal of Applied Sport Psychology 2016;28:291-308.</p> <p><u>Writing assignment:</u></p> <ul style="list-style-type: none"> • According to the article, distinguish between the 2 types of transitions that athletes will face throughout their athletic career, and give examples of each. • According to the article, list at least 3 factors that may lead to a more difficult time transitioning, and at least 3 factors that may be protective against a difficult transition. • According to the article, describe at least 3 strategies (write at least one sentence for each) that might help athletes to transition more smoothly.
22	Exercise as a treatment for mental illness	<p><u>Reading 1:</u> Schuch FB, Vancampfort D, Richards J, et al. Exercise as a treatment for depression: a meta-analysis adjusting for publication bias. Journal of Psychiatric Research 2016;77:42-51.</p> <p><u>Writing Assignment 1:</u></p> <ul style="list-style-type: none"> • In 4 or more sentences, summarize the results of the Schuch article on exercise as a treatment for depression. Based on

		<p>these results and any other information you have, do you find it justified to recommend exercise for your patients as a treatment for depression? Why or why not?</p> <ul style="list-style-type: none">• The optimal characteristics of exercise for people with depression and related disorders remain unknown. However, according to the Schuch article, describe the findings on <i>type</i> of exercise (aerobic, anaerobic, or mixed), <i>intensity</i> of exercise, and <i>supervision</i> of exercise for people with depression. <p><u>Reading 2:</u> Ramos-Sanchez CP, Schuch FB, Seedat S, et al. The anxiolytic effects of exercise for people with anxiety and related disorders: an update of the available meta-analytic evidence. <i>Psychiatry Research</i> 2021;302:114046.</p> <p><u>Writing assignment 2:</u></p> <ul style="list-style-type: none">• In 4 or more sentences, summarize the results of the Ramos-Sanchez article on the anxiolytic effects of exercise for people with anxiety and related disorders. Based on these results and any other information you have, do you find it justified to recommend exercise for your patients
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		<p>as a treatment for anxiety? Why or why not?</p> <ul style="list-style-type: none"> • The optimal characteristics of exercise for people with anxiety and related disorders remain unknown. However, according to the Ramos-Sanchez article, describe the findings of recent research on <i>intensity</i> of exercise for people with anxiety.
23	Overtraining syndrome	<p><u>Reading:</u> Lewis NA, Collins D, Pedlar CR, et al. Can clinicians and scientists explain and prevent unexplained underperformance syndrome in athletes: an interdisciplinary perspective and 2016 update. <i>BMJ Open Sport-Exercise Medicine</i> 2015;1(1):e000063.</p> <p><u>Writing assignment:</u></p> <ul style="list-style-type: none"> • According to the article, list 10 common causes for athlete underperformance. • According to the article, define “unexplained underperformance syndrome” (UUPS), and explain why the authors prefer this term over the more commonly used term “overtraining”. • You are a sports psychiatrist working with a 24 year old professional runner who competes in the 5 kilometer run. She gradually begins to experience athletic underperformance and

		<p>fatigue over the past 2 months, during one of her highest mileage times of year, with no immediate explanation. According to the article, describe the following as applicable to your work with her: a) 15 items within her psychiatric/other medical/sport training history about which to ask her in order to help with diagnosis of the problem; b) 9 routine tests to consider obtaining; c) recommended management plan, specifically addressing any additional referrals to be made, if history and tests return negative; d) advise you might give to her coach regarding the importance of <i>athlete perception</i> of the training plan.</p>
24	Athletes with disabilities	<p><u>Reading:</u> Swartz L, Hunt X, Bantjes J, et al. Mental health symptoms and disorders in Paralympic athletes: a narrative review. British Journal of Sports Medicine 2019;53(12):737-740.</p> <p><u>Writing assignment:</u></p> <ul style="list-style-type: none"> • According to the article and in the context of the stereotype that people with disabilities must have emotional problems, including mental health symptoms and disorders, describe at least 3 negative consequences of

		<p>the “Super-crip” phenomenon.</p> <ul style="list-style-type: none"> • According to the article, provide at least 1 potential benefit that might be obtained from or serve as rationale for additional research on each topic from the following list: stressors particular to participation in elite disability sport; a wider range of symptoms of psychological distress including the impact of trauma; the impact of participation in disability sport on personhood and mental health; mental health impact of retirement from elite disability sport; and therapeutic potential of disability sport to promote mental health.
25	The role of culture in sports	<p><u>Reading:</u> Castaldelli-Maia J, de Mello e Gallinaro JG, Falcao RS, et al. Mental health symptoms and disorders in elite athletes: a systematic review on cultural influencers and barriers to athletes seeking treatment. British Journal of Sports Medicine 2019;53(11): 707-721.</p> <p><u>Writing assignment:</u></p> <ul style="list-style-type: none"> • According to the article, write at least 4 sentences describing how stigma is the strongest barrier in athletes seeking mental health treatment. Find one example from the media of an athlete

		<p>speaking out publicly about their own mental health challenges. Provide the citation (e.g., web link) for your example, and write at least 3 sentences describing the example, including if and how you think this athlete's public acknowledgement might challenge mental health stigma among athletes.</p> <ul style="list-style-type: none">• According to the article, name at least 8 factors that may facilitate elite athletes seeking mental healthcare.• Find at least one other research article that discusses any mental health risks or concerns within a racial or ethnic minority athlete population. Provide the citation, and write at least 4 sentences to summarize the findings described in the article.• Find at least one other research article that discusses any mental health risks or concerns within an LGBTQ athlete population. Provide the citation, and write at least 4 sentences to summarize the findings described in the article.• Reflect on your own cultural background and, if applicable, your own history of sports participation. Write a paragraph on how this
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		background might affect interactions with athlete-patients from a variety of demographic groups.
26	Working with sports organizations and teams	<p><u>Reading:</u> McDuff DR, Garvin M. Working with sports organizations and teams. International Review of Psychiatry 2016;28(6):595-605.</p> <p><u>Writing assignment:</u></p> <ul style="list-style-type: none"> • According to the article, describe recommendations for the following aspects of sports performance and mental health services for athletic teams: a) timing and location of services offered; b) diversity and make-up of professionals providing these services; and c) integration of these services with those of the rest of the sports medicine team. • Imagine that you are considering a job offer to work as a sports psychiatrist for a professional baseball team. The offer notes that you would only be employed during the playing season, as it is not felt that there would be enough work to keep you busy during other times of the year. According to the article, describe at least one service that in fact you could provide for the team during each of the following times, and thus, your rationale for

		<p>why it would be prudent to hire a sports psychiatrist <i>year-round</i> for a professional sports team: a) off-season; b) pre-season; c) season; d) post season.</p> <ul style="list-style-type: none"> Imagine you are the sports psychiatrist who directs mental health services for a professional basketball team. Administrative leadership of the team is proposing that you and your mental health team's services be evaluated based on win/loss tallies of the team. According to the article, describe reasons why this might not be an accurate metric, and list at least 7 metrics that might be more appropriate.
27	Ethical issues in sports psychiatry	<p><u>Reading:</u> None. Answer questions to the best of your availability with resources/experiences available to you, including any readings and discussions with supervisors or mentors. It is understood that, with no single reference article available, answers will vary, and leeway will be granted in scoring this item. Thoroughness and reasons for your responses are required.</p> <p><u>Writing assignment:</u></p> <ul style="list-style-type: none"> Describe how you would handle the following ethical challenges:

		<p>a) You are a salaried employee in the athletic department at a Division I university, employed to treat student athletes. You are treating a female softball player for recurrent major depressive disorder, PTSD, and borderline personality disorder. She has had 3 hospitalizations in the last 18 months, and this has proven disruptive to her team. The athlete's athletic trainer and coach contact you to ask about prognosis and likelihood of future decompensations and hospitalizations, as they are considering cutting her from the team due to her mental health absences. Comment on this specific situation, as well as any larger strategies for addressing the potential conflict of interest in roles you fill.</p> <p>b) You are treating a football player at a Division I university for generalized anxiety disorder and alcohol use disorder. You are aware that it is common knowledge</p>
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		<p>among the football players that internal drug testing happens on Monday afternoons. He recently admits to having been using a friend's methylphenidate to help with studying. He is aware of NCAA prohibitions against this, in the absence of an official diagnosis and appropriate documentation. He asks if you are able to make that diagnosis, as he believes it is present, and in the meantime, he asks about the half-life of methylphenidate so that he can avoid testing positive on Monday afternoons.</p> <p>c) You are treating a sprinter at a Division I university for panic disorder and major depressive disorder. She wins the NCAA National Championship 100 meter dash. She would like to give you her track jersey to add to your office decor as a token of her appreciation (she observes that you have some generic sports decorations but nothing related to track and field, and it</p>
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		<p>would make her feel good to have her sport represented on your walls). She points out that nothing on the jersey will indicate from whom it came.</p> <p>Now that you have completed the curriculum, the learner and attending supervisor are asked to please complete brief evaluations of the curriculum. See above for web links to do so.</p>
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Other information: Membership in the International Society for Sports Psychiatry (ISSP) is available to medical students, residents, and fellows who are interested in the field, at discounted rates for trainees (free for medical students). More information is available at: <https://sportspsychiatry.org>. The ISSP typically holds its annual Business Meeting and Scientific Session every spring, and anyone with interest is invited to attend (information about this event posted on the ISSP website and sent out on the membership list-serv in advance of the meeting). Additionally, a group mentorship program is available to interested ISSP members as part of ISSP membership.

Additional references for those interested in further reading:

Baron DA, Reardon CL, Baron SH, eds. Clinical Sports Psychiatry: An International Perspective. United Kingdom: Wiley, 2013.

Begel D, Burton RW, eds. Sport Psychiatry. New York: Norton Professional Books, 2000.

Creado SA. Peak Sleep Performance for Athletes: The Cutting-Edge Sleep Science That Will Guarantee a Competitive Advantage. Available on Kindle and Amazon, 2020.

Glick I, Kamis D, Stull T, eds. The ISSP Manual of Sports Psychiatry. New York: Routledge Press, 2018.

McDuff DR. Sports Psychiatry: Strategies for Life Balance and Peak Performance. Arlington (USA): American Psychiatric Publishing, 2012.

Mistry AD, McCabe T, Currie A, eds. Case studies in sports psychiatry. UK: Cambridge, 2020.

Noordsy D, ed. Lifestyle Psychiatry. Arlington (USA): American Psychiatric Publishing, 2019.