

Statistical Report: CCSP® and DACBSP® Examinations November 2024 Administration

Prepared for:

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Executive Summary

This report provides a summary of the results for November 2024 administration of the two certifications offered by the American Chiropractic Board of Sports Physicians™ (ACBSP™): Certified Chiropractic Sports Physician® (CCSP®) and Diplomate of the American Chiropractic Board of Sports Physicians® (DACBSP®).

Two major changes were made for this administration: a new blueprint was created for the CCSP®, and a pretest model was adopted for both exams (only 170 of 200 items on each exam were scored). A total of 70 candidates took the CCSP® and 9 candidates took the DACBSP®.

Items were flagged based on statistical considerations or candidates' comments, reviewed by experts, and some were rescored with credit to all examinees if determined flawed. The rescored results are presented in this report and just for the scored items. The coefficient alpha reliability indices were strong for CCSP® (0.83); meanwhile given the small sample sizes, it was not calculable for DACBSP®. For the CCSP, given the new test specifications, this administration was used as the 'base' form, using a cut score of 70% that was parallel to the cut score obtained from an earlier cut score study. For the DACBSP, the cut score was set at 70% given administration changes.

Introduction

The CCSP® and DACBSP®

The American Chiropractic Board of Sports Physicians[™] (ACBSP[™]) provides two certifications to the field: Certified Chiropractic Sports Physician® (CCSP®) and Diplomate of the American Chiropractic Board of Sports Physicians® (DACBSP®). ACBSP[™] administers the CCSP® and DACBSP® exams twice each year. Both consist of 200 4-option multiple choice items in a linear format, in two sections.

For this administration, three major changes were introduced. First, the blueprint for the CCSP® was significantly modified from 11 to 13 domains. This change was a result of a new job task analysis study that was conducted by ACBSP using a group of subject matter experts (SMEs). Second, unlike historical administration where all 200 items on each test were included in the final candidate score, a pretest model was introduced. More specifically, for both tests, instead of scoring 200 items (total test length), 30 items on each exam were designated as 'pretest' or unscored items and 170 items were considered scored items. This model allows evaluation of items and the ability for SMEs to evaluate new items before the items are used on a scored exam. Ultimately, the use of the pretest model helps build more valid and reliable items, and also helps in the equity of scores as candidates will only be scored on items that are performing as intended. Lastly, the equating process for the DACBSP test was discontinued and a straight 70% pass rate cut score was used. This change was made given the historically small sample sizes on the DACBSP and the inability to make the proper assumptions required necessary for valid and consistently interpretable equating results.

November 2024 Administration

Both tests were delivered on November 11, 2024, with live remote proctoring using two video streams per candidate. After the tests were delivered, an initial psychometric analysis was performed. Items with very low difficulty (P-value) or discrimination (point-biserial) were flagged for review by content experts. Items with specific comments left by examinees were also flagged. Any items deemed to have issues by the experts were granted credit to examinees. Examinees were then rescored with the updated parameters.

Equating & Cut Scores

Given the changes made to the CCSP® blueprint given the job task analysis, and the switch to a pretest model where only 170 items were scored, it was not possible to equate the CCSP® to a prior CCSP® test form. Although changing the test specifications and length of an exam generally requires a new cut score study, given the use of the exam, the ACBSP executive committee decided that using the original pass rate from a historical CCSP® cut score study would be acceptable if aligned to the new exam. Thus, using the historical cut score study pass rate of 70%, the final cut score for the CCSP® was considered to be 119 correct out of 170. This CCSP® 2024 form will thus be considered the base form moving forward in which all future CCSP® forms will be equated to. For the DACBSP®, given the change from equating to a percent correct pass score, given a pass rate of 70%, the cut score used was also 119.

Psychometric Performance

The following table provides summary statistics across each form of the exams. It's important to consider that the results in this report were made using only scored items. The most important result in this table is the coefficient alpha reliability index, which summarizes the consistency or repeatability of the measurement process onto a scale of 0 (random numbers) to 1 (perfect measurement). It was 0.83 for the CCSP®, which is sufficiently reliable. The sample size was too low with DACBSP® to calculate this coefficient.

Table 1. Summary statistics for each ABSCP™ exam

Ctatiatia	Exam		
Statistic	CCSP®	DACBSP®	
Examinees	70	9	
Scored Items	170	170	
Mean	127.47	112.00	
SD	12.28	12.20	
Min	97	96	
Max	159	134	
Pass rate	119	119	
Alpha	0.83	NA	
SEM	5.03	NA	

^{*} Note: Statistics are calculated after any problematic items are removed due to statistical and/or content issues.

The tables below provide summary statistics of examinee performance on the domains of each test.

Table 2. Summary statistics on the CCSP® domains

CCSP® Domain	Items	Mean	Min	Max
A. Team Physicians and Events	21	15.34	9	20
B. Evaluate and Manage Concussions	8	7.49	5	8
C. Clinical Biomechanics	13	8.57	3	12
D. Sports Nutrition	8	5.06	1	8
E. The Environment and the Athlete	7	5.70	4	7
F. Medical Legal Aspects	13	11.16	5	13
G. Diagnosis of a Sports Injury	25	18.74	12	24
H. Treatment of Sports Injuries	20	15.34	10	20
I. Adjunctive Therapies	16	10.64	6	14
J. Prevention of Sports Injuries	11	9.57	6	11
K. Diagnostic Imaging	8	5.64	2	8
L. Emergency Procedures	10	6.24	3	10
M. Special Clinical Considerations	10	7.97	5	10

Table 3. Summary statistics on the DACBSP® domains

DACBSP® Domains	Items	Mean	Min	Max
01. Exercise Physiology (I)	7	4.22	2	6
02. Rehabilitation Concepts and their Application to Athletes (II)	14	10.00	7	12
03. Sport Specific Biomechanics (III)	6	4.00	3	5
04. Diagnostics in Sports Medicine (IV)	5	3.00	1	4
05. Evaluation and Management of Soft Tissue Injuries (IX)	19	12.22	10	16
06. Functional and Supportive Taping, Bracing and Splinting (V)	7	4.89	3	6
07. Biopsychosocial Considerations (VI)	6	4.44	3	5
08. Sports Equipment and Technology (VII)	3	2.00	0	3
09. Advanced Principles of Joint Manipulation (VIII)	8	3.78	2	6
10. Special Populations in Sport (X)	28	16.00	12	21
11. Emergency Procedures (XI)	16	11.22	10	14
12. Sports Medicine Research (XII)	4	2.11	1	3
13. Team Physicians Concepts (XIII)	21	14.44	12	17
14. Anti-doping and Pharmacology in Sports Medicine (XIV)	3	2.44	1	3
15. Concussion (XV)	16	13.11	11	15

16. Nutrition (XVI)	3	1.67	0	3
17. Preparticipation Examination (XVII)	4	2.44	1	3

Program Statistics

To sit for the ACBSP™ exams, candidates must first complete extensive training at a university with a relevant training program. Candidates list this in their application process. The tables below provide student performance results for each program. Detailed reports, which can be provided to the schools are provided in Appendix A.

Table 4. Program Statistics for the CSSP®

Program	N	Fail	Pass	Program Mean
DC Online	52	23.1%	76.9%	128.29
Life University	2		100.0%	136.00
Logan University	9	44.4%	55.6%	122.56
National Universtiy of Health Sciences/Dconline	2		100.0%	122.00
Northeast College of Health Science	2		100.0%	125.50
Southern California University of Health Sciences	1		100.0%	129.00
University of Western States	2	50.0%	50.0%	126.50

Table 5: Program Statistics for the DACBSP®

Program	Ν	Fail	Pass	Program Mean
DC Online	5	60.0%	40.0%	110.80
Southern California University of Health Sciences	2	100.0%		104.00
University of Western States	2	50.0%	50.0%	123.00

Summary

November 2024 was an overall successful administration of the CCSP® and DACBSP® examinations. Despite the modification of the blueprint, the CCSP® met psychometric adequate standards and showed a good pass rate, although it is important to pay attention to the details described for the candidates. For the case of the DACBSP®, the size of the sample makes it difficult to confirm some values, but the information given by the candidates becomes valuable for monitoring. Given the change to a pretest model, it is no possible to compare data with prior years, but undoubtedly it is a valuable contribution as a base line to ensure the quality of this exams.

Appendix A: Statistics for the CCSP® Exam

PERFORMANCE ON THE NOVEMBER 2024 CCSP® EXAM ACROSS PROGRAMS

Listed below is the performance on the November 2024 CCSP® exam grouped by program. Each table shows the average performance for the program compared to the average performance across all programs. Also listed are the total numbers of items for each examination.

DC ONLINE

CCSP® Domain	Items	Mean	Min	Max
A. Team Physicians and Events	21	15.48	9	20
B. Evaluate and Manage Concussions	8	7.52	5	8
C. Clinical Biomechanics	13	8.77	3	12
D. Sports Nutrition	8	4.98	1	8
E. The Environment and the Athlete	7	5.82	4	7
F. Medical Legal Aspects	13	11.31	5	13
G. Diagnosis of a Sports Injury	25	18.85	12	24
H. Treatment of Sports Injuries	20	15.19	10	19
I. Adjunctive Therapies	16	10.50	7	14
J. Prevention of Sports Injuries	11	9.62	6	11
K. Diagnostic Imaging	8	5.85	2	8
L. Emergency Procedures	10	6.42	3	10
M. Special Clinical Considerations	10	7.98	5	10
TOTAL	170	128.28	97	159

LIFE UNIVERSITY

2 Candidates

CCSP® Domain	Items	Mean	Min	Max
A. Team Physicians and Events	21	15.50	15	16
B. Evaluate and Manage Concussions	8	7.50	7	8
C. Clinical Biomechanics	13	8.50	8	9
D. Sports Nutrition	8	7.00	6	8
E. The Environment and the Athlete	7	5.00	5	5
F. Medical Legal Aspects	13	11.00	10	12
G. Diagnosis of a Sports Injury	25	21.00	20	22
H. Treatment of Sports Injuries	20	18.00	16	20
I. Adjunctive Therapies	16	12.50	12	13
J. Prevention of Sports Injuries	11	10.00	10	10
K. Diagnostic Imaging	8	7.00	7	7
L. Emergency Procedures	10	4.00	4	4
M. Special Clinical Considerations	10	9.00	9	9
TOTAL	170	136	136	136

LOGAN UNIVERSITY

9 Candidates

CCSP® Domain	Items	Mean	Min	Max
A. Team Physicians and Events	21	15.55	11	19
B. Evaluate and Manage Concussions	8	7.22	6	8
C. Clinical Biomechanics	13	8.11	6	12
D. Sports Nutrition	8	5.11	2	7
E. The Environment and the Athlete	7	5.22	4	7
F. Medical Legal Aspects	13	10.55	9	12
G. Diagnosis of a Sports Injury	25	17.22	12	21
H. Treatment of Sports Injuries	20	15.22	14	17
I. Adjunctive Therapies	16	10.55	6	13
J. Prevention of Sports Injuries	11	9.00	8	10
K. Diagnostic Imaging	8	5.00	3	7
L. Emergency Procedures	10	6.33	5	8
M. Special Clinical Considerations	10	7.44	6	8
TOTAL	170	122.52	110	139

NATIONAL UNIVERSTIY OF HEALTH SCIENCES/DCONLINE

CCSP® Domain	Items	Mean	Min	Max
A. Team Physicians and Events	21	135.50	13	14
B. Evaluate and Manage Concussions	8	8.00	8	8
C. Clinical Biomechanics	13	6.50	6	7
D. Sports Nutrition	8	5.00	4	6
E. The Environment and the Athlete	7	5.00	4	6
F. Medical Legal Aspects	13	10.50	10	11
G. Diagnosis of a Sports Injury	25	19.50	19	20
H. Treatment of Sports Injuries	20	15.00	14	16
I. Adjunctive Therapies	16	11.50	10	13
J. Prevention of Sports Injuries	11	9.50	9	10
K. Diagnostic Imaging	8	4.50	4	5
L. Emergency Procedures	10	6.00	6	6
M. Special Clinical Considerations	10	7.50	7	8
TOTAL	170	244.00	120	124

NORTHEAST COLLEGE OF HEALTH SCIENCE

CCSP® Domain	Items	Mean	Min	Max
A. Team Physicians and Events	21	13.50	13	14
B. Evaluate and Manage Concussions	8	7.50	7	8
C. Clinical Biomechanics	13	9.00	9	9
D. Sports Nutrition	8	5.00	5	5
E. The Environment and the Athlete	7	5.00	4	6
F. Medical Legal Aspects	13	11.00	10	12
G. Diagnosis of a Sports Injury	25	18.50	17	20
H. Treatment of Sports Injuries	20	17.50	17	18
I. Adjunctive Therapies	16	9.50	9	10
J. Prevention of Sports Injuries	11	11.00	11	11
K. Diagnostic Imaging	8	4.50	3	6
L. Emergency Procedures	10	4.50	4	5
M. Special Clinical Considerations	10	9.00	9	9
TOTAL	170	125.50	122	129

SOUTHERN CALIFORNIA UNIVERSITY OF HEALTH SCIENCES

CCSP® Domain	Items	Mean	Min	Max
A. Team Physicians and Events	21	14.00	14	14
B. Evaluate and Manage Concussions	8	7.00	7	7
C. Clinical Biomechanics	13	9.00	9	9
D. Sports Nutrition	8	4.00	4	4
E. The Environment and the Athlete	7	7.00	7	7
F. Medical Legal Aspects	13	9.00	9	9
G. Diagnosis of a Sports Injury	25	21.00	21	21
H. Treatment of Sports Injuries	20	14.00	14	14
I. Adjunctive Therapies	16	14.00	14	14
J. Prevention of Sports Injuries	11	10.00	10	10
K. Diagnostic Imaging	8	4.00	4	4
L. Emergency Procedures	10	8.00	8	8
M. Special Clinical Considerations	10	8.00	8	8
TOTAL	170	129.00	129	129

UNIVERSITY OF WESTERN STATES

CCSP® Domain	Items	Mean	Min	Max
A. Team Physicians and Events	21	15.00	11	19
B. Evaluate and Manage Concussions	8	7.50	7	8
C. Clinical Biomechanics	13	7.00	7	7
D. Sports Nutrition	8	5.50	5	6
E. The Environment and the Athlete	7	6.00	5	7
F. Medical Legal Aspects	13	12.00	12	12
G. Diagnosis of a Sports Injury	25	19.00	17	21
H. Treatment of Sports Injuries	20	16.00	14	18
I. Adjunctive Therapies	16	11.50	11	12
J. Prevention of Sports Injuries	11	9.00	9	9
K. Diagnostic Imaging	8	5.00	3	7
L. Emergency Procedures	10	4.50	4	5
M. Special Clinical Considerations	10	8.50	8	9
TOTAL	170	126.50	114	139

Appendix B: Statistics for the DACBSP® Exam

PERFORMANCE ON THE NOVEMBER 2024 DACBSP® EXAM ACROSS PROGRAMS

Listed below is the performance on the November 2024 DACBSP® exam grouped by program. Each table shows the average performance for the program compared to the average performance across all programs. Also listed are the total numbers of items for each examination.

DC ONLINE

DACBSP® Domain	Items	Mean	Min	Max
01. Exercise Physiology (I)	7	4.20	3	5
02. Rehabilitation Concepts and their Application to Athletes (II)	14	9.40	7	11
03. Sport Specific Biomechanics (III)	6	4.00	3	5
04. Diagnostics in Sports Medicine (IV)	5	3.20	2	4
05. Evaluation and Management of Soft Tissue Injuries (IX)	19	12.40	10	16
06. Functional and Supportive Taping, Bracing and Splinting (V)	7	4.20	3	5
07. Biopsychosocial Considerations (VI)	6	4.80	4	5
08. Sports Equipment and Technology (VII)	3	2.40	2	3
09. Advanced Principles of Joint Manipulation (VIII)	8	3.80	3	5
10. Special Populations in Sport (X)	28	16.20	12	19
11. Emergency Procedures (XI)	16	11.00	10	13
12. Sports Medicine Research (XII)	4	2.00	1	3
13. Team Physicians Concepts (XIII)	21	14.00	12	17
14. Anti-doping and Pharmacology in Sports Medicine (XIV)	3	2.20	1	3
15. Concussion (XV)	16	13.00	11	15
16. Nutrition (XVI)	3	1.40	0	3
17. Preparticipation Examination (XVII)	4	2.60	2	3
TOTAL	170	110.80	96	122

SOUTHERN CALIFORNIA UNIVERSITY OF HEALTH SCIENCES

DACBSP® Domain	Items	Mean	Min	Max
01. Exercise Physiology (I)	7	3.00	4	2
02. Rehabilitation Concepts and their Application to Athletes (II)	14	11.00	10	12
03. Sport Specific Biomechanics (III)	6	3.00	3	3
04. Diagnostics in Sports Medicine (IV)	5	2.00	1	3
05. Evaluation and Management of Soft Tissue Injuries (IX)	19	12.00	10	14
06. Functional and Supportive Taping, Bracing and Splinting (V)	7	6.00	6	6
07. Biopsychosocial Considerations (VI)	6	3.50	3	4
08. Sports Equipment and Technology (VII)	3	0.50	0	1
09. Advanced Principles of Joint Manipulation (VIII)	8	2.50	2	3
10. Special Populations in Sport (X)	28	15.00	12	18
11. Emergency Procedures (XI)	16	11.00	10	12
12. Sports Medicine Research (XII)	4	1.50	1	2
13. Team Physicians Concepts (XIII)	21	14.50	14	15
14. Anti-doping and Pharmacology in Sports Medicine (XIV)	3	2.50	2	3
15. Concussion (XV)	16	12.50	12	13
16. Nutrition (XVI)	3	1.00	0	2
17. Preparticipation Examination (XVII)	4	2.50	2	3
TOTAL	170	104.00	96	112

UNIVERSITY OF WESTERN STATES

DACBSP® Domain	Items	Mean	Min	Max
01. Exercise Physiology (I)	7	5.50	5	6
02. Rehabilitation Concepts and their Application to Athletes (II)	14	10.50	10	11
03. Sport Specific Biomechanics (III)	6	5.00	5	5
04. Diagnostics in Sports Medicine (IV)	5	3.50	3	4
05. Evaluation and Management of Soft Tissue Injuries (IX)	19	12.00	10	14
06. Functional and Supportive Taping, Bracing and Splinting (V)	7	5.50	5	6
07. Biopsychosocial Considerations (VI)	6	4.50	4	5
08. Sports Equipment and Technology (VII)	3	2.50	2	3
09. Advanced Principles of Joint Manipulation (VIII)	8	5.00	4	6
10. Special Populations in Sport (X)	28	16.50	12	21
11. Emergency Procedures (XI)	16	12.00	10	14
12. Sports Medicine Research (XII)	4	3.00	3	3
13. Team Physicians Concepts (XIII)	21	15.50	14	17
14. Anti-doping and Pharmacology in Sports Medicine (XIV)	3	3.00	3	3
15. Concussion (XV)	16	14.00	14	14
16. Nutrition (XVI)	3	3.00	3	3
17. Preparticipation Examination (XVII)	4	2.00	1	3
TOTAL	170	123.00	112	134

Appendix C: Examinee Comments

The following tables provide a summary of examinee comments regarding the exam process; content-specific comments are pulled out and provided to the exam committee during the item review process, before releasing results.

CCSP® Comments

Content

More straight forward questioning

There were questions of stuff that was not presented during our classes

Spelling errors made reading the questions mildly difficult

Some of the questions were pretty vague in their approach and lacked appropriate information in order to decipher between answers.

In the CCSP program, please provide more review information for the physiotherapy modalities. Not much was covered in the slides.

The wrestling question was confusing, more of a statement than a specific question to me.

The question about when in the preparticipation exam at risk behaviors and eating disorders should be discussed was written in a confusing manner and the answers were not great examples.

The questions I found were fair. However, avoiding double negatives in questions is helpful and having direct questions is also helpful.

Some of the questions were not clear as far as specificity goes, have multiple correct answers, and were worded strangely.

Some of the answers were really close and hard to pick the right one

Some questions in part 1 in which there were overlapping timelines. Example was concussion recovery.

Some questions seemed incomplete

Just make sure to eliminate spelling errors, such as "atlantoacial" should be "atlantoaxial"

Question 187 the wording is difficult to understand what you are asking

Please use the whole name definition for all abbreviations uniformly throughout the whole test In some questions, the choice for answers didn't make sense and were too similar.

Some of the case studies need more information in order to provide a more accurate diagnosis or course of care. Also, I didn't have any radiology questions. No attached images?

The use of "they" in grammatically incorrect when referring to a single athlete. This grammatical discrepancy adds confusion to the questions. The preparation materials for the exam do not at all guide the examinee towards the depth and breadth of the material.

First, some of the questions are hard to understand, some of them because of the incorrect spelling or because it provides multiple answers that can be chosen. Especially for a person that English is the second language, there should be clearer language used to make it less confusing.

I did notice a couple of grading rehab phase questions (example Grade I, II, III). If you could be more specific on the grade that would be helpful. As many different protocols have different grades and phases to them.

Some of these questions are ridiculous or need more context. Also, there were no images of x-rays at all, which is misleading from the CCSP classes that we took.

Logistics

One hundred questions in a row exhausts a lot of mental calories. Maybe break up the sections even more.

CCSP® Comments

Scratch paper would be nice

I think we should be allowed to have scratch paper or given some way that we can work through some of these questions. Drawing anatomy or voicing your thoughts when it comes to diagnosis or reviewing symptoms is huge. I think by not allowing this you put most people taking this at a disadvantage.

Providing the option to take this exam at a testing site would be helpful as some of us have small living quarters and it is hard to control the entire environment during test time.

The practice test was absolutely necessary to feel ready on test day. Communication was clear. A more focused test plan/study guide would have been helpful.

Online proctoring worked fine, but I would have preferred a testing center so there was less stress around setting up my room and computer properly.

My test did not open in LockDown browser, my proctor told me to continue in the web browser, so I followed those instructions. All tabs and applications on my computer were closed. It would be helpful if there was a feature that allowed 'crossing off' on answer choices

General

The questions so far seem fair, and a good test of knowledge needed on and off field

Overall, the test was great

Great overall test of knowledge

The exam provides a good balance in terms of difficulty of the questions. I think all the topics are well balanced.

The test was okay but was not able to see any images

Make the test shorter

It was good and very helpful

Worked out great

Thought it was well administered. No problems

Simple enough

Efficient. No issues

I'm not a huge fan of the online testing, but I'm also not very savvy with technology

There was a question that mentioned SCAT 5 that should be updated to SCAT 6

I felt unprepared for the psychological test question

DACBSP® Comments

Content

There were several typos and misspelled words throughout the test

There were duplicated questions

Some questions need to be more specific

There were controversial questions that could have been debated for multiple correct answers

For the radiographs it would be helpful to have the radiograph views since that would be included in

practice

There were a few questions that were worded poorly and were confusing

The physiological change for an intelligence impaired athlete was difficult to understand the reasoning

Logistics

The information session with the ACBSP informed me that I would be able to have a piece of scratch paper; however, the proctoring did not.

The proctor session of the first section of my test did not open in the lockdown browser, as it was indicated that it was supposed to.

The proctor portion of the exam is clunky

The process to get on was very detail and you had to be very tech base to get it going. I wish they can just remove in and set up those parameters to make it go.

It would be nice to be able to have pen and paper (blank) so that we can write out notes. Also, the ability to go for a light walk during the 30 minutes break would be nice to allow for blood flow.