

ACBSP CCSP Job Analysis

Spring 2019

By Plut Examination Services
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This report details the results of the job analysis conducted by the ACBSP and Plut Examination Services for the Certified Chiropractic Sports Physician (CCSP) examination performed in the Spring of 2019. The job analysis began with a review of the previous task list and test specification by Subject Matter Experts (SMEs) provided by the ACBSP. All had obtained their CCSP certification. The task list was updated to reflect current practice as a result of this review the SMEs concluded that the current test categories accurately describe the practice of CCSPs. No changes were made to the test-specification categories. One category, Research Fundamentals, was added to the CCSP test specification as a result of the survey.

The survey was administered on Survey Monkey. Five hundred and forty-two individuals were invited to participate in the survey. Of these, two-hundred and eighty-five individuals started the survey and provided the status of their practice and two-hundred and fifty-seven of those invited to participate did not respond. Slightly more than 52% of those asked to participate began the survey, an excellent response rate. One hundred and thirty-eight completed the survey for an attrition rate of slightly less than 52%. All but one respondent indicated they had CCSP certification. There were enough candidates who completed the survey to be confident that the later ratings were valid. It is unknown if those who did not complete the survey differed from those who did but there were enough candidates who completed the survey that the results of the later parts of the survey should be stable statistically.

Demographics

The job analysis obtained background information about the respondents, their geographic location, gender, and areas of practice. When obtaining a representative sample, ideally the sample should be geographically diverse. The survey asked respondents about their state of license. All states were represented except for DE, MD, MS, NH and WI. The state with the greatest number of respondents was California with 53 respondents indicating they held a license in that state. There were eight states in which only one candidate indicated they were licensed there (AL, AR, HI, ME, MT, NY, VT, and WY). This sample was geographically diverse and likely reflect the geographical distribution of CCSPs within the United States.

78% of the respondents were male and 22% female. It is unknown how this sample compares to the entire population of CCSPs, but with the high response rate to the survey, it is likely representative.

Eighty-six percent of the respondents indicated they were in full-time private practice. Slightly more than one percent indicated they were full-time college instructors and slightly less than two percent indicated they were in part-time private practice and a college instructor. Slightly more than eleven percent designated their employment as other and these options are listed in Appendix A.

The degrees earned by respondents are:

B.A./B.S.	77.54%
M.S.	13.33%

D.C.	99.65%
Ph. D	0.00%
Other	8.07%

The responses for the Other category of degrees are listed in Appendix B. When there was more than one respondent who indicated he or she held a degree, the number of respondents indicating they had that degree is listed in the table in parentheses after the degree.

The average number of years that the respondents were actively involved in sports medicine was 12.9 with a minimum of 0 and a maximum of 51. The standard deviation of this category is 9.37, indicating that there is significant variation in the number of years respondents were actively involved in sports medicine but, with an average of 12.9 years in sports medicine, the respondents are very experienced in sports medicine. The percentage of practice that is involved in the care, prevention or rehabilitation of sports injuries by the respondents is 41% with a minimum of 0% and a maximum of 100%. The standard deviation for this statistic is 41.05, which indicates there is variability in the percentage of practice of the respondents that is devoted to the care, prevention or rehabilitation of sports injuries, but again, the high percentage indicates that the respondents have a much experience in the care, prevention or rehabilitation of sports injuries.

The survey asked which of the following specific sports agencies the respondents are affiliated with and the results are:

ACA	70.62%
FICS	22.03%
ACSM	9.60%
ACA SC	25.42%
NSCA	16.38%
NATA	4.52%
Other	26.55%

The specific other organizations indicated by the respondents are listed in Appendix C. Again, when more than one respondent indicated they were affiliated with a sports agency, the number of respondents indicating that sports agency are listed in the table in parentheses after the organization.

The survey inquired if the respondents had additional certification and 61% indicated that yes, they did. The additional certifications can be found in Appendix D. Many respondents indicated more than one certification. The list is quite long indicating that the respondents are well educated and have diverse professional experience. When more than one respondent indicated a particular certification, the number of people responding are listed in the table in parentheses after the certification.

The respondents were asked the percentage of their practice that is devoted to specific sports (listed below). They were asked to provide the percentage of their time that is devoted to athletes from each of the sports listed with the total percentage adding up to 100%. There was no one sport in which everyone indicated they were involved with. The most common sport was Football with 61.25% of the respondents indicating they dealt with athletes who were involved in that sport. The percentage of respondents who indicated they dealt with athletes from the sport and the average percentage of time involved with athletes from each sport is listed in Appendix E. All of the sports listed had at least one respondent who worked with athletes from that sport. There was little correlation between the number of practitioners who were working with athletes from a sport and the percentage of time practitioners worked with a particular sport. There were a few respondents who worked exclusively with one particular sport. The other sports that were referenced by the respondents are listed in Appendix F.

Analysis of tasks.

Respondents were asked to rate the frequency and importance of the tasks. These tasks were organized under each of the categories that are used on the test specification for the CCSP examination and had been determined to be the important area of practice for CCSPs. The survey also asked the respondents to list any additional tasks that were not listed on the job analysis survey. When the survey was complete, these tasks were reviewed by a committee of CCSPs to determine if these additional tasks were already included in the tasks on the CCSP job analysis survey or if they were additional tasks that should be added to the task list, and if there were additional essential categories that were not included in the survey. The SMEs felt that most of the tasks were already included in the task list but one additional category was added to the test specification and list of essential aspects of the CCSPs jobs, Research Fundamentals.

The following table contains the average of the responses to each task in the survey, averaged for the frequency and importance of each task across the entire category, with both frequency and importance are averaged together in the last column.

Category	# of Tasks	Average Importance	Average Frequency	Average of Importance and Frequency
IA Concepts of a Sports Physician	26	4.284	3.662	3.973
IB Exercise Physiology	4	4.252	3.567	3.915
IC Clinical Biomechanics	6	4.220	3.695	3.958
ID Sports Nutrition	6	3.563	2.575	3.069
IE Environment and the Athlete	7	4.000	2.837	3.419
IF Medical/Legal Aspects	11	4.634	4.269	4.451

IIA1 Diagnosis of Sports Injuries	14	4.454	3.854	4.154
IIA2 Treatment of Sports Injuries	13	4.435	3.883	4.159
IIA3 Prevention of Sports Injuries	20	4.208	3.538	3.873
IIB Diagnostic Imaging	4	4.353	3.443	3.898
IIC CPR and Emergency Procedures	11	4.421	2.599	3.510
IID Special Clinical Considerations	17	4.287	3.191	3.739
IE Adjunctive Therapy	5	4.478	3.934	4.206

The importance scale had a range of 1 to 5. All average importance ratings are above 4, indicating the respondents believe that all of the areas measured on the job analysis survey are important. Some of the areas are less frequently used, but still important. CPR and emergency procedures are rated as important but are not frequently performed. While the ratings of importance and frequency of use can be used to determine the test specification they were not used to do so for the CCSP examination. Since all tasks were rated as more than very important, the ratings of the tasks did not provide enough variability to accurately reflect the varied weightings needed for the test categories. The results of the survey confirm that the categories used are comprehensive and are the fundamental areas of knowledge, skills, and abilities for CCSPs.

The test specification for the CCSP was set by a committee of SMEs. They were given the definition of minimal competence for CCSPs (Appendix G) and the category list. They were asked to allot the numbers of items they felt should be in each category based on the frequency of use and importance of each category with the total number of their items totaling 225. Each SME provided their answers and they were averaged for each category. These averages were reviewed by the SMEs and all agreed that they accurately reflect what the CCSP test specification should be. The revised CCSP test specification is listed below.

Category	
IA Concepts of a Sports Physician	26
IB Exercise Physiology	19
IC Clinical Biomechanics	20
ID Sports Nutrition	16
IE Environment and the Athlete	11
IF Medical/legal Aspects	11
IIAA Diagnosis of Sports Injuries	26
IIAB Treatment of Sports Injuries	22
IIAC Prevention of Sports Injuries	19

IIB Diagnostic Imaging	16
IIC CPR and Emergency Procedures	12
IID Special Clinical Considerations	11
IIE Adjunctive Therapy	12
IIF Research Fundamentals	4
Total	225

This test specification differs some from the previous test specification but not dramatically so. The review, coupled with confirmation from the job analysis survey, enable the CCSP examination to comprehensively measure the fundamental knowledge, skills and abilities needed to be a competent CCSP.

Summary

The job analysis completed in the Spring of 2019 provided information on the characteristics of CCSPs. The survey was geographically diverse and because of the high response rate, almost certainly matches the characteristics of the entire population of CCSPs. The CCSPs are notable by their diverse educational backgrounds and diverse professional experience.

The survey validated that the ACBSP had accurately and comprehensively described the tasks that are performed by CCSPs. It further validated that the areas of practice that are tested by the CCSP examination are appropriate and comprehensive. The review of the test specification updated the test specification so that the categories and weightings of the categories reflect current practice of the CCSPs. The procedures followed in the job analysis were standard psychometric practice and contribute to the CCSP being a reliable and valid instrument for assessing competence of CCSP candidates.

Appendix A, Indicated Practice Options For Those Who Indicated Practice Other Than Full-Time Private Practice, Full-Time College Instructor, or Part-Time Private Practice and College Instructor

Full time Private Practice, part time instructor LCCW, UC Berkeley adjunct faculty Sports medicine

Part-time private practice

Full-time onsite, Part-Time Private practice

Full-time reconditioning specialist for the Minnesota Twins
part time practice

Full time Clinician Educator University of Bridgeport
work for a large health system

Part time practice

Chiropractic Sports Fellow

Full time outpatient tribal health system

Part-Time private practice

Medical Science Advisor for medical device company

Sports Medicine Resident at SCUHS

Part time private practice

UWS

Full time Hospital practice

Full time private practice, part time SCUHS and CSUN

Full Time Orthopedic Practice, Hospital Employee

Sports resident/instructor at Chiropractic school

Full Time Medical Clinic

Part Time Private Practice

Full time private practice and college instructor at Rhode Island College

Full time VHA and Part time college instructor Palmer

Occasional practice, stay at home dad

Part-Time Private Practice

Retired. Returned to practice helping Drs in their practice. Two part time jobs

Keiser University

Full time Private Practice and Part Time Instructor NWHSU

Full Time Hospital Outpatient with Adjunct Faculty at Franciscan University of Steubenville

Full time medical system

SCUHS sports medicine resident

Appendix B. Other Degrees

CCSP (3 indicated this as a degree)

CCEP

MS Higher Education

M.Ed.

L. Ac. (2 indicated this degree)

Functional Medicine

ICCSP

MBA (4 indicated this degree)

M.ed.

BPS- Bachelor in Professional Studies

BS Biology

BS Life Science

FACO

CCSP, FIAMA

DABCO, AP DC, Neurologist

A.S.

DABCO

AS in Physical Therapy

Appendix C, Other Sports Organizations Respondents are affiliated with.

ABCSP, used to be involved with ACA

ACA Neuro Council

ACBSP (5 responses)

ACCO

anjc sports council

Cal Chiro, ACBSP

CCA

CCC, CCA

CrossFit

Currently none (finances). previously: ACSM, NSCA, ACA

FTCA

High School

ICAP, ICAC, CCA

ICS

IL Chiropractic Society

many public school districts, two colleges and two universities

MCA (2 responses)

Minnesota Chiropractic Association and Minnesota Chiropractic Association Sports Council

MN Sports Council

NASM

NCCA

New Jersey Sports Council

NFL

Pro Sport Chiropractic

Professional Baseball Chiropractic Society (PBCS), Professional Hockey Chiropractic Society (PHCS)

TPI

TPI, Pro Baseball Chiropractic Society

Use to be ACA. and NJ sports council

WSCA

WSCA(Washington State Chiro Assoc. sports council) World Assoc. Bench Press and Deadlifting, International Powerlifting Assoc, U.S. Powerlifting Association, International Professional Ring Officials Assoc., United Full Contact Federation, FICS, plus seven

Appendix D. Additional Certifications.

A.R.T. Graston technique. Rock Taping
ACBCN
ACSM CPT. NASM FNS
Active Release technic, Advanced Proficiency rate in Activator, Cox technic certified in lower back and cervical spine
Active release technique, graston technique, shift concussion management
Active Release Techniques and Kinesio taping practitioner
Acupuncture (7 responses)
Acupuncture, Dry Needling
Advanced practice certification from national University of health sciences
Advanced Proficiency Activator Methods
AK, Acupuncture, Cox
Almost finished with Pediatric with ICPA
American Board Quality Assurance and Utilization Review
Animal Chiropractic
ART (4 responses)
ART Elite Provider, Graston Certified, MDT Certified
ART full body level 1 and level 2
ART Instructor
ART, Acupuncture
ART, DNS Practioner, CKTP, CSCS, TPI Practioner
ART, FDM, Dry Needling, Acupuncture, taping, golf injuries, USA swimming
Art, fms, faktr, McKenzie
ART, FMT, GT
ART, Graston
ART, Graston, FAKTOR-PM, Dry Needling
ART, Graston, FAKTR, rocktape, KT tape, FMS, SFMA, CrossFit, Crossfit football, American college of sports medicine
ART, GRASTON, FMS, SFMA, TPI
ART, Graston, FMT thru Rock Tape, RRCA Run coach certified
ART, Kinesio taping and Rock Tape
ART, SFMA, TPI, GRASTON
ART, TPI, CPT
ATC (3 responses)
ATC, CACCP (pediatrics)
ATC, DC, CCSP
ATC, LAT, CSCS, CES, PES, CPT, FNS, SFS, ART, DN, ACU
AVCA certified animal chiropractor
Board Certified Atlas Orthogonalist (BCAO)
CACCP - Pediatrics through the ICPA
CCACP

CCEP (2 responses)
CCEP (extremities), Licensed Massage Therapist
CCEP, CKT, Webster
ccep, cscs,
CCEP, CSCS, PES
CCEP, FASA, FIACA
CCEP, FMS-2, SFMA-1, YBT, FMT (Rock Blades)
CCEP, Graston, ICCSP, NASM-CES
CCN - Certified Clinical Nutritionist
CCRD
CCSP (3 responses)
CCSP, CCEP
CCSP, CSCS, EMT, Acu, FMT
CCSP, CSCS, EMT-B, Kinesio Taping, Graston
ccsp, iccsp, graston, art
Certified Athletic Trainer
Certified Strength and Conditioning Specialist (CSCS), Certified Chiropractic Extremity Practitioner (CCEP)
CFMP (certified functional medicine practitioner)
CFSC ART FMS SFMA FR FRCms Rock tape
CIDN (certified Integrative Dry Needling), TPI Lvl 1
cktp, art full body certified
Concussion Registry
CPR
CSCS (7 responses)
CSCS, AGFI (Titleist Performance Advance Golf Fitness Instructor), Diplomate in Acupuncture, Certified Shoulder Specialist
CSCS, ART full body, Graston, Dx MSK Ultrasound
Dabco
DABCO, AP DC, NEURO
DABCO, FACO, CSCS, ICSSD, CES, PES, FMS, SFMA
DACCP - Pediatrics
DACNB
DACNB FABBIR
DACRB
DANCB ACUPUNCTURE
DICCP, L.Ac, QME
Dipl. OM
DOT Medical examiners
Dry Needling
dry needling, cscs
EMT
FDM

FDM, Nutrition
FIAMA
FirstLine Therapy (Metagenics)
Functional Medicine
Functional Movement System, Selective Functional Movement Assessment, Graston, ART, Functional Range Conditioning, Dynamic Neuromuscular Stabilization, Mulligan Technique, International Academy of Medical Acupuncture
Graston certified (2 responses)
Graston Certified M2, CPR card, Safe Sport certified.
Graston, ART, PRI, Dry Needling, RockTape, FMS/SFMA, FAKTR, DNS A & B & running
Graston, BLS
Graston, Diplomate in Neurology and Pain Management
Graston, Dry Needling, Cupping, Faktr, ART
Graston, FAKTR, Activator
Graston, FLTR, Kinesio, Rock tape
Graston, FMS, SFMA, CFL1, FAKTR
Graston. Testing completed for rehab diplomate.
ICCSP (2 responses)
Kinesio Tape, Graston, Webster Technique
LMT
LMT, BLS
MUA, Granstd, KT
NCBE Acupuncture, FRCms, FR, FRA, FDM, FMT-1, SFMA II
NRCME
NREMT
NR-EMT
QME (3 responses)
Rehab and acupuncture
RockTape, Motion Palpation Institute
SFMA
SFMA and FAKTR
SFMA Lv 1, RockTape FMT lv 1&2, RPR 1&2, KLASER Class IV, 100hrs Chiropractic acupuncturist, National SAFE instructor, SafeSport Trained, GreenLight Certified
SFMA Lvl 1,2, FCS, FMS Lvl 1,2,
SFMA, FMS, Graston, NKT
SFMA, Graston, ART
trigenics, faktr
Various certifications in soft tissue work (both hands on and IAST) along with dry needling.
Various Modality/functional movement certifications
Webster Certification
Webster Technique and Pediatrics
Webster's Certification
WI State chiro nutritional cert.

Appendix E, Number and Percentages of Sports Dealt With By Respondents

Sport Involved Average %

	18.82%	13.96
Aerobics		
Archery	5.16%	4.0
Auto racing	6.27%	8.24
Badminton	2.21%	4.83
Baseball	60.51%	10.75
Basketball	56.09%	9.92
Biathlon	1.85%	5.20
Bobsledding	1.48%	10.50
Bodybuilding	36.53%	9.94
Bowling	6.64%	2.78
Boxing	9.59%	6.96
Canoe / Kayak	5.53%	3.47
Cheer / Spirit Squad	28.78%	6.55
Cross Country Running	36.16%	8.84
Cross Country Skiing	6.64%	7.89
CrossFit	58.30%	14.44
Curling	1.48%	3.00
Cycling	28.41%	7.64
Dance	30.62%	7.77
Diving	3.32%	4.17
Equestrian Events	16.61%	4.47
Fencing	2.58%	4.43
Field Hockey	3.32%	3.22
Figure Skating	6.27%	3.88
Football	61.25%	13.77
Frisbee Sports	2.58%	4.14
Table Tennis	0.37%	10.00
Golf	47.23%	9.71
Gymnastics	38.84%	7.45
Handball	0.74%	2.00
Hockey	28.78%	10.64
Lacrosse	12.5%	5.85
Luge	0.74%	7.50
Martial Arts	24.35%	7.73
Modern Pentathlon	0.74%	3.00
Mountain Climbing	4.42%	7.33

Olympic Weightlifting	12.18%	6.89
Paralympic Sport	1.84%	22.40
Polo	1.11%	3.00
Powerlifting	24.35%	9.03
Race-walking	0.74%	7.50
Racquetball	1.85%	6.60
Rodeo	7.38%	5.80
Inline/Roller Skating	0.74%	10.50
Rowing	6.27%	2.65
Rugby	8.12%	10.82
Running	59.78%	15.73
Sailing	1.11%	1.00
Skating	2.58%	7.00
Skeleton	0.37%	20.00
Snow Skiing	15.87%	7.14
Sky Diving	0.74%	1.00
Shooting	4.43%	3.25
Soccer	38.75%	11.84
Softball	25.83%	7.16
Special Olympics	1.11%	3.67
Speedskating	0.37%	1.00
Squash	1.48%	3.00
Surfing	5.54%	8.60
Swimming	27.68%	7.28
Synchronized Swimming	0.74%	1.50
Tennis	21.03%	7.00
Team Handball	0.74%	5.50
Track and Field	33.21%	9.42
Triathlon	18.82%	7.84
Volleyball	28.04%	6.67
Water Skiing	1.85%	1.80
Water Polo	4.05%	4.91
Windsurfing	0.37%	5.00
Wrestling	21.77%	7.07

Appendix F, Other Sports

Walking for health 35

I teach extremity adjusting at LCCW, I volunteer in the UC Berkeley training room treating all sports male and female athletes

VARIES, I practice in Community Health Center

Aussie Footie

Crossfit

rock climbing

Ski

Snowboarding

Motocross

Pickleball

Downhill biking

Rodeo

Exercise / weightlifting and running

MMA

Appendix G. Definition of CCSP Minimal (entry level) competence.

A Minimally Competent CCSP Will Have the Following Characteristics:

I EMERGENCY

Know basic CPR, basic lifesaving skills, basic skills for on field emergency management.

Know when and how to refer and triage.

Ability to provide first aid to minor injuries on a non-emergent basis

Know when to activate EMS.

II DIAGNOSIS

Ability to diagnose most common sport injuries.

Identify most common sports related conditions related to the spine and extremities

Basic ability to interpret and analyze findings from the patient history, physical examination, laboratory data, imaging studies and diagnostic testing for most common sports injuries.

III TREATMENT

Follow basic treatment protocols for the most common sports injuries related to the spine and extremities

Treatment includes: manipulative techniques, rehabilitative techniques, taping and bracing, soft tissue techniques, and physiotherapy modalities

IV PRE-PARTICIPATION PHYSICAL

Able to perform pre-participation physical examinations according to existing guidelines

V TEAM PHYSICIAN

Have basic knowledge of the functions of a team physician.

Able to communicate with coaches, athletes, and individuals in other disciplines in a professional manner.

Understand the scope of practice and roles of individuals within a sports environment

VI MECHANISMS OF INJURY

Understanding the mechanisms of injury for the most common sports

VII SPORTS NUTRITION, PSYCHOLOGY, EXERCISE PHYSIOLOGY, GENDER AND AGE ISSUES

Basic knowledge of sports nutrition, sports psychology, exercise physiology and gender and age issues.

VIII STRENGTH AND CONDITIONING

Knowledge of basic strength and conditioning techniques related to sports performance

IX REHABILITATION

Basic knowledge of phases of recovery and rehabilitation for the most common sports injuries.