

**Certified Specialist in Psychometry
Examination**

**Study Guide
2020**



Distributed by the Board of Certified Psychometrists

Contents

BCP Mission Statement.....	3
Introduction to the CSP Examination Study Guide	3
Purposes of the Study Guide	3
Best Practices	3
Ethics	4
Principles of Ethics	5
Professional Limitations	5
Dual Relationships	6
Privacy, Confidentiality, and Security	6
Release of Information (ROI)/ Disclosures	6
Psychometrist supervision.....	6
Behavioral Observations.....	7
Diagnostic Considerations	8
Neuroanatomy.....	9
Cerebrum	9
The Frontal Lobe	10
The Parietal Lobes	10
The Temporal Lobes	10
The Occipital Lobe.....	11
Diencephalon.....	11
Midbrain (mesencephalon).....	11
Hindbrain.....	11
Medulla Oblongata.....	11
Statistics	12
CSP Exam Tips and Suggestions	14
Content Outline	14
Before taking the exam	15
During the exam	15
Sample Examination Questions	17
Terms to know for Observation	21
Terms to know for Diagnostic Considerations.....	22
Tests to Study.....	24
References	27

BCP Mission Statement

The Board of Certified Psychometrists provides Board level certification for the profession of psychometry. By successfully completing a rigorous and comprehensive examination, Board Certified Specialists in Psychometry demonstrate the knowledge, experience, and ongoing education to administer and score psychometric measures, thereby setting the gold standard on which clinicians rely. We are dedicated to promoting and protecting the value of the Specialist in Psychometry Certification.

Introduction to the CSP Examination Study Guide

Psychometrists have been assisting in neurocognitive assessments since the 1930s, but until the Certification for Specialist in Psychometry, there were no clear guidelines to define and standardize the profession.

The CSP credential delivers a standard identification and qualification system for psychometrists that makes clinical neuropsychology more analogous to other medical fields that utilize clinical technicians. CSPs support the standards of administration and the accurate evaluation of neurocognitive functioning. The CSP credential also serves to protect the neuropsychologists' liability and supports court testimony in forensic cases.

Purposes of the Study Guide

Though Psychometrists have grown comfortable with administering tests, with the advent of the CSP Examination, the tables have been turned - quite literally – and they find themselves faced with the prospect of sitting for an examination about examining others. With this study guide, the Board of Certified Psychometrists hope to help examinees understand what should be studied to succeed in passing the CSP examination. *It will not provide the specific information, but instead help direct a person in their individual efforts.*

The CSP examination was created by psychometrists for psychometrists and is designed to reflect the level of competency required to responsibly practice the profession. The principal goal of the Certified Specialist in Psychometry is to ensure that the psychometrist is knowledgeable and can competently administer and score the assessments deemed necessary by the neuropsychologist.

Historically, the most challenging areas for CSP examinees have been Ethics/Legal, Statistics, and Neuroanatomy.

To avoid confusion, in this Study Guide, we will be using the terms Patient/Client to describe the person to whom the psychometrist is administering an assessment measure, and Examinee in reference to those who are sitting for their CSP exam.

Best Practices

The principal goal of the psychometrist is to competently administer and score the assessments deemed necessary by the clinician and get the best effort possible from the patient. The following concepts are examples of Best Practices and expected to be used as standard operating procedures except in cases where a professional judgment call is made (such as if a person does not understand the official protocol, it should be reworded and explained as needed).

- Psychometrists must establish and maintain rapport with clients as well as keep detailed observations of the clients' behaviors during testing. The neuropsychologist will require a detailed behavioral observation sheet in order to be able to interpret variable behaviors during testing that may influence the testing results. These standardized expectations are required to ensure that education, training and supervision of psychometrists are the same across the field (The Use of Neuropsychology Test Technicians in Clinical Practice, 2000).
- Ensure the client is prepared for the assessment (i.e., note whether they are hungry, tired, or using narcotic medications). The first part of your interaction with the client should include introductory statements, then talk to the client about the expected length of the assessment, provide information regarding when breaks will be taken, where the restrooms or other amenities are located, and what to do in case of an emergency.
- It is imperative that the psychometrist maintains notes that supply information about the client's performance, behaviors, and responses (see Behavioral Observations section). There are significant variables in the client's behavioral observations that may very well affect the provider's findings.
- Carefully consider the order of administration of tests. Ensure the placement of tests that show order of administration effects (i.e. WCST, Category Test) are in optimal positioning. Additionally, planning is required in order to avoid test interference. Avoid filling in delays with tasks that have similar visual or verbal content.
- Constructive and encouraging feedback such as "Remember, I just want you to give your best effort. It's ok not to know all the answers as long as you try your best" or "I know it's hard, but if the test doesn't push you past your limits, we won't be able to find them" often help reduce stress or worry the client has about their performance. Alleviate the client's testing anxiety as much as possible to avoid ceiling effects; however, be careful not to make comments that in any way suggest an interpretation of the patient's performance.
- The testing environment should be comfortable, well lit, not too hot or cold, and minimize distractions as much as possible. Provide comfortable chairs and breaks as necessary. It is advised that testing breaks be provided after 1.5 hours of testing.
- Consider the reason for the testing referral when setting up your testing room such as making sure that a patient with a history of seizures is seated in a chair with arms that is not on wheels.
- Whenever possible, always use the script provided by the creators of the test so that validity of the administration is protected.

Ethics

Decisions regarding ethical questions can be some of the most harrowing a psychometrist will encounter in their careers. It can be especially difficult to make ethical decisions when they require you to take action that is opposed to the standard procedures of a practice. The first and best way to deal with these problems is to know what those ethical standards are.

Ethics and the law are not the same thing, and it is important to know the difference between the Standards as they apply to psychometry. The fact that something is legal does not automatically make it ethical.

Legal Standards are based upon written law.

Ethical Standards are a set of moral principles that govern a person's behavior or the conducting of an activity based upon the human principles of right and wrong. To understand ethical standards, you

should be thoroughly familiar with the Code of Ethics standards from BCP, NAP, APA, NAN, ACA, and NBCC.

Regulations vary by setting:

- Clinical – each institution may have their own regulations you must follow
- Research – IRB guidelines
- Forensic
- Rehabilitation (Acute, Long-term, and community)
- Child assessment (age of consent, custodial parent, guardianship, school assessments)
- Older Adults- questions of competency; ability to give consent
- Psychiatric Units
- Private Practice
- Military
- Educational/vocational
- Third party observers

Principles of Ethics

- Beneficence and Non-maleficence – take care to do no harm.
- Fidelity and Responsibility – uphold professional standards of conduct, accept responsibility for your behavior, and seek to manage conflicts of interest.
- Integrity – promote accuracy, honesty, and truthfulness in the science, teaching and practice of psychology.
- Justice – all persons are entitled to access and benefit from the contributions of psychology.
- Autonomy and Respect for People’s Rights and Dignity- privacy, confidentiality, and self-determination.

Professional Limitations

Psychometrists must recognize the limits of their profession and not attempt to practice outside the scope of their expertise.

One of the most important and frequently encountered problems occur when patients ask questions regarding their progress or results. Psychometrists should make it clear that they cannot give the patient that information and encourage the patient to continue to give their best effort on all tasks. The psychometrist should explain that the neuropsychologist will interpret the tests and provide feedback.

Psychometrists *must not* interpret results of instruments unless interpretation is a designated aspect of a specific job and the Psychometrist meets all state and local licensing requirements.

Licensure and Certification are commonly confused terms, and you should understand the difference between them.

Licensure is legal authority granted by the state to practice one’s profession within a designated scope of practice.

Certification is typically a voluntary process provided by an organization with the intent of providing public protection by recognizing individuals who have successfully met all the necessary requirements and demonstrated their ability to perform their profession competently.

Dual Relationships

Psychometrists who have an administrative, supervisory, and/or personal relationship with individuals seeking testing services must not serve as the Psychometrist and should refer the individuals to other professionals. The psychometry relationship remains confidential. Psychometrists must not engage in activities that seek to meet their personal or professional needs at the expense of the patient. Sexual intimacy with patients is unethical. Psychometrists will not be sexually, physically, or romantically intimate with patients/clients or former patients/clients within a minimum of two years after terminating the Psychometry relationship.

Privacy, Confidentiality, and Security

Privacy is the freedom and ability to control the use and dissemination of information that relates to oneself, and **Confidentiality** is the primary tool for protecting privacy. Those handling confidential information must adhere to strict legal and ethical limitations governing access and disclosure. **Security** is comprised of the measures an organization employs to protect the confidentiality of both patient and test information.

However, confidentiality can sometimes be waived without signed consent of the patient:

- Court order/forensic evaluations/workman's compensation – In these cases, the client is often the court, the attorneys, or another third party. The client is not always the patient. The person paying for the evaluation is the client.
- Parents or legal guardians of a minor
- Suspected abuse of child or vulnerable adult – mandated reporters – In all US states there are mandates that professionals are required to report suspected cases of child abuse. If a psychometrist does not report, legal action can be taken against the psychometrist, the supervising licensed psychologist and the facility.
- Peer review, accreditation, quality assurance- Records may be reviewed by outside agencies in certain cases.
- Clear and imminent danger to themselves – If the psychometrist believes the patient is in danger of harming themselves, it is incumbent upon the psychometrist to intervene by breaching confidentiality and taking appropriate action to ensure the safety of the patient.
- Danger to others – Duty to warn; be familiar with the Tarasoff case. All medical and mental health personnel have a duty to warn those who are at risk of danger from a patient. The duty includes contacting the intended victim, their family, the police or taking other steps to safeguard the intended victim and document the steps taken, including attempts to consult with the supervising licensed psychologist and/or applicable facility administrator.

Release of Information (ROI)/ Disclosures

In both clinical and research settings, the concept of **informed consent** is vital to disclosing the risks and benefits associated with a procedure or a set of procedures. The main purpose of informed consent is to ensure that the researcher or practitioner adhere to and uphold the five Principles of Ethics in their particular activity. (1) Patients should be informed of the purpose of the evaluation or research, (2) their right to decline to participate or to withdraw at any time, (3) the foreseeable consequences of declining or withdrawing, (4) any prospective benefits, and (5) the limits of confidentiality. A release of information is a document detailing to whom confidential information concerning the patient may be released to. It is also necessary to notify the patient of when confidentiality must be breached such as instances of danger or abuse to self or others.

Psychometrist supervision

Psychometrists may be **supervised** by more experienced Psychometrists, but ultimate responsibility for the psychometric services is the responsibility of the supervising Psychologists/Neuropsychologists who meet all state and local licensing laws.

Behavioral Observations

As psychometrists, one of our many responsibilities is to observe the patient throughout the testing process and report our observations to the clinician. A patient's behavior will likely fluctuate during a testing session due to fatigue, medication half-life, difficulty or dislike of a task, etc. It is therefore possible to have multiple or conflicting observations regarding patient behaviors. It is important to note the duration of testing for billing and reporting purposes.

Here are some things to consider when noting observations.

General Presentation and Appearance

- Was the patient accompanied by anyone, if so by whom? (parent, grandparent, etc.)
- What time did they arrive? (on time, early, late)
- What was their arousal like? (alert, drowsy, etc.)
- How is their hygiene and grooming? (odor, unwashed, etc.)
- What is their physical stature? (weight, physical anomalies, etc.)
- Do they require or use adaptive equipment? (bifocals, hearing aid, walker, etc.)
- Did the patient take their medication on the test date?
- Had the patient eaten?

Waiting Room Behavior

- How did the patient interact with those who accompanied them?
- How did they behave while waiting? (interacted, read, slept, etc.)
- Did they separate easily from whomever accompanied them?
- Did they transition easily back to testing after taking a break?

Social Interaction, Affect, Behavior, and Attention

- How easy was it to build rapport with the patient?
- How was the patient's eye contact during testing?
- What was the patient's interaction style like? (inappropriate, whining, pleasant, etc.)
- Was their behavior age-appropriate?
- Based on facial expressions and body language (concrete, observable behaviors), what is the patient's emotional tone like? (euphoric, anxious, irritable, etc.)
- Was the patient cooperative?
- What was their activity level like during testing? (fidgety, very little movement, etc.)
- What was their attention span like during testing? (Focused, distracted, etc.)
- How often and during which tasks did the patient complain?
- Was the patient in any pain during testing? If so, what kind and what was done to mitigate this?

Working Style

- What is the patient's task initiation like? (impulsive, needed extra prompts, etc.)
- What is the patient's approach to the tasks? (indifferent, perfectionistic, impulsive, etc.)
- What is their working pace like?
- What is the patient's response to success and failure?
- How does the patient respond to tasks that were challenging or frustrating?
- Does the patient exhibit any task avoidance?

- Does the patient give good effort? (If not, is a validity test performed?)

Language/Communication

- How are the patient's listening skills?
- How well does the patient comprehend instructions?
- How is the patient's expressive language (speech)? (too fast/slow, slurred, too loud/soft, articulation errors, etc.)
- How is their verbal expression/production fluency? (goal directed, single word phrases, word finding problems, etc.)

Sensory/Motor

- How is the patient's hearing?
- How is the patient's vision?
- How is their pencil grip? (mature, dynamic tripod, static tripod, wrist/arm not integrated in movement, etc.)
- How are their fine motor skills? (writing, manipulation of testing materials, etc.)
- How are their gross motor skills? (gait, posture, balance, etc.)
- Are there any tremors? If so, when were they most noticeable? Were they bilateral?

Other

- Were any behavior management strategies used and if so how effective were they? (redirection, reinforcement, extra breaks, etc.)
- What else is noteworthy about the patient that wasn't already mentioned? Overall how did the testing session go?
- List any abnormal behaviors
- List any unusual comments

Diagnostic Considerations

An integral part of making observations is to be alert for symptoms of *already diagnosed* diseases/injuries. Many diseases/disorders/injuries (epilepsy, ADHD, Parkinson's, anxiety, oppositional defiance, autism, etc.) have distinctive symptoms, and it is the psychometrist's responsibility to recognize these and report on their severity and frequency.

For instance, there are times when the patient may seem to "zone out," which could be due to something as typical as inattention or as critical as an absence seizure. They should also be aware of the proper procedures in the event of more intense symptomatic behaviors such as grand mal seizures. At times, seizures can present in unusual ways, such as laughing, so it is helpful to ask the patient or their guardian/support person what their specific seizures look like. Make note of times, duration, and preceding events if a seizure is observed.

A psychometrist should never use observed behaviors to attempt to diagnose a patient or to interpret any responses or results. Diagnosis and interpretation is the duty of the clinician, not the psychometrist. Instead, they should make detailed observations that will assist the clinician in making those leaps.

Neuroanatomy

Neuroanatomy is essentially the part of anatomy dealing with the nervous system, where the nervous system is comprised of nerves, the brain, spinal cord, and ganglia (a mass of nerve tissue existing outside the central nervous system). This section will focus primarily on the neuroanatomy of the brain.

The brain consists of five parts based on embryotic development: the **cerebrum**, **diencephalon**, **midbrain**, **hindbrain**, and the **medulla oblongata**. The brain stem is comprised of the last three of these parts.

Cerebrum

The **cerebrum** is made up of two layers. The thin, gray outer layer, called the **cortex**, consists primarily of cell bodies. The white inner layer consists of myelinated axons and is where the **hippocampus** and **basal ganglia** may be found. The **cerebrum** is also made up of two hemispheres: the Right and the Left.

Though embedded within the white matter, the **basal ganglia** do not consist of white matter. It is a collection of four gray matter nuclei and is associated with motor control.

The **hippocampus** is a major component of the memory system and plays a major role in normal learning and retention. “The hippocampus is well-designed for rapid association of information from many different cortical areas.”

The two hemispheres of the brain are connected to each other by a C-shaped structure called the **corpus callosum**. They each have their own general, though not necessarily exclusive, functions. The table below shows the general functions of the Right and Left hemispheres typical of a right-hand dominant individual. Left-handed and ambidextrous individuals may have slight differences. Note that the Right hemisphere involves primarily nonverbal abilities while the Left hemisphere involves mostly language abilities.

<u>Left Hemisphere</u>	<u>GENERAL FUNCTION</u>	<u>Right Hemisphere</u>
words letters	VISION	geometric patterns faces emotional expression
language sounds	HEARING	non-language sounds music
verbal memory	MEMORY	nonverbal memory
<u>Left Hemisphere (cont.)</u>	<u>GENERAL FUNCTION (cont.)</u>	<u>Right Hemisphere (cont.)</u>
speech grammar rules reading writing arithmetic	LANGUAGE	emotional tone of speech
	SPATIAL ABILITY	geometry sense of direction distance mental rotation of shapes

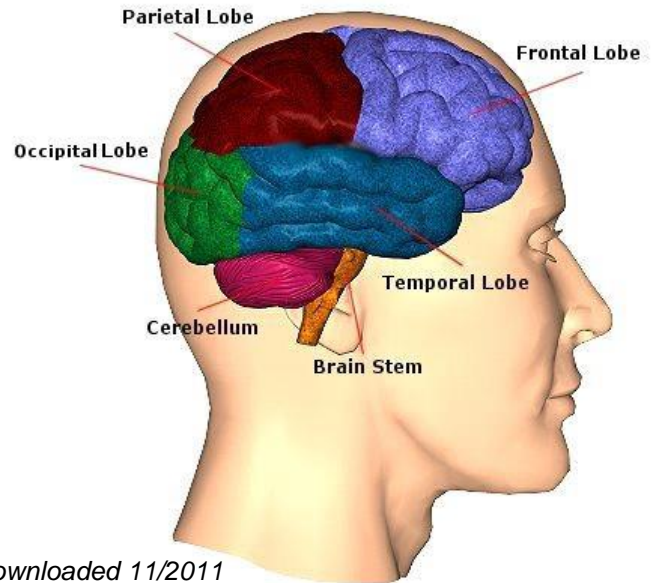
Each hemisphere is divided into four regions or **lobes**: **frontal**, **parietal**, **temporal**, and **occipital**.

The Frontal Lobe

Through the evolution of the human brain, the **frontal lobes** are the most recent to have developed and have become the largest structure of the brain. They are often considered to house the “highest” and most complex human brain functions. Damage to the **frontal lobe** often leads to disruptions in cognitive and social behaviors. The following is a list of some of the common functions of the **frontal lobes**:

- “Consciousness” or awareness of what we are doing in our environment
- Involvement of how we initiate activity in response to our environment
- Judgment and decision-making
- Control of expressive language
- Assignment of meaning to chosen words
- Involvement in word associations
- Mediation of movements
- Memory for habits and motor activities

Image downloaded 11/2011
<http://www.neuroskills.com>



The Parietal Lobes

The **parietal lobes** are generally concerned with spatial relationships (right parietal lobe, predominantly) and with the initiation of movement (left parietal lobe, predominantly). They have also been found to be involved with body schema, which is an individual’s spatial awareness of his/her body parts. Other functions of the **parietal lobes** include perception of touch, visual attention, and the integration of senses to understand a single concept.

The Temporal Lobes

The **temporal lobes** contain the primary auditory cortex and are associated with spoken language for they contain the **Broca’s** and **Wernicke’s areas**. Both areas are larger on the left side than on the right side in right-handed individuals.

The main output of the **Broca’s area** is to the face and tongue areas of the adjacent motor cortex. Therefore, it is associated with expressive language, or the ability to get one’s words out.

The **Wernicke’s area**, conversely, is associated with receptive language, or the ability to understand spoken words.

Though both areas are larger in the left hemisphere, both areas are simultaneously active in the right hemisphere. These right-side areas are believed to be concerned with **prosody** – the recognition of rhythmic effects of spoken language like cadence, volume, and emphasis, for example.

The **temporal lobes** also play a role in auditory memory and complex perceptual organization.

The Occipital Lobe

The **occipital lobes** contains the primary visual cortex.

Diencephalon

The **diencephalon** is comprised of the **thalamus**, **hypothalamus**, and **epithalamus**. The **thalamus** is the nervous system's main sensory relay. The **hypothalamus** is key to controlling the autonomic nervous system, emotional states, and acts as the body's thermostat.

The **epithalamus** has multiple components, only two of which will be mentioned here. One component is the **pineal gland**, which affects daily and seasonal body rhythms by the secretion of melatonin. The regulation of hunger and thirst is accomplished through another component of the **epithalamus** – the **habenula**.

Midbrain (mesencephalon)

The **midbrain** serves important functions in motor movement, particularly movements of the eye, and in auditory and visual processing.

Hindbrain

The **cerebellum** is the most noticeable part of the **hindbrain** and, with the **basal ganglia**, helps with coordinating and learning skilled movements. Also, by receiving information from the structures and sensors in the middle ear, it plays a role in maintaining one's equilibrium.

Another part of the hindbrain is the **reticular formation**, also known as the reticular activation system. It is believed to play the role of maintaining general arousal or consciousness.

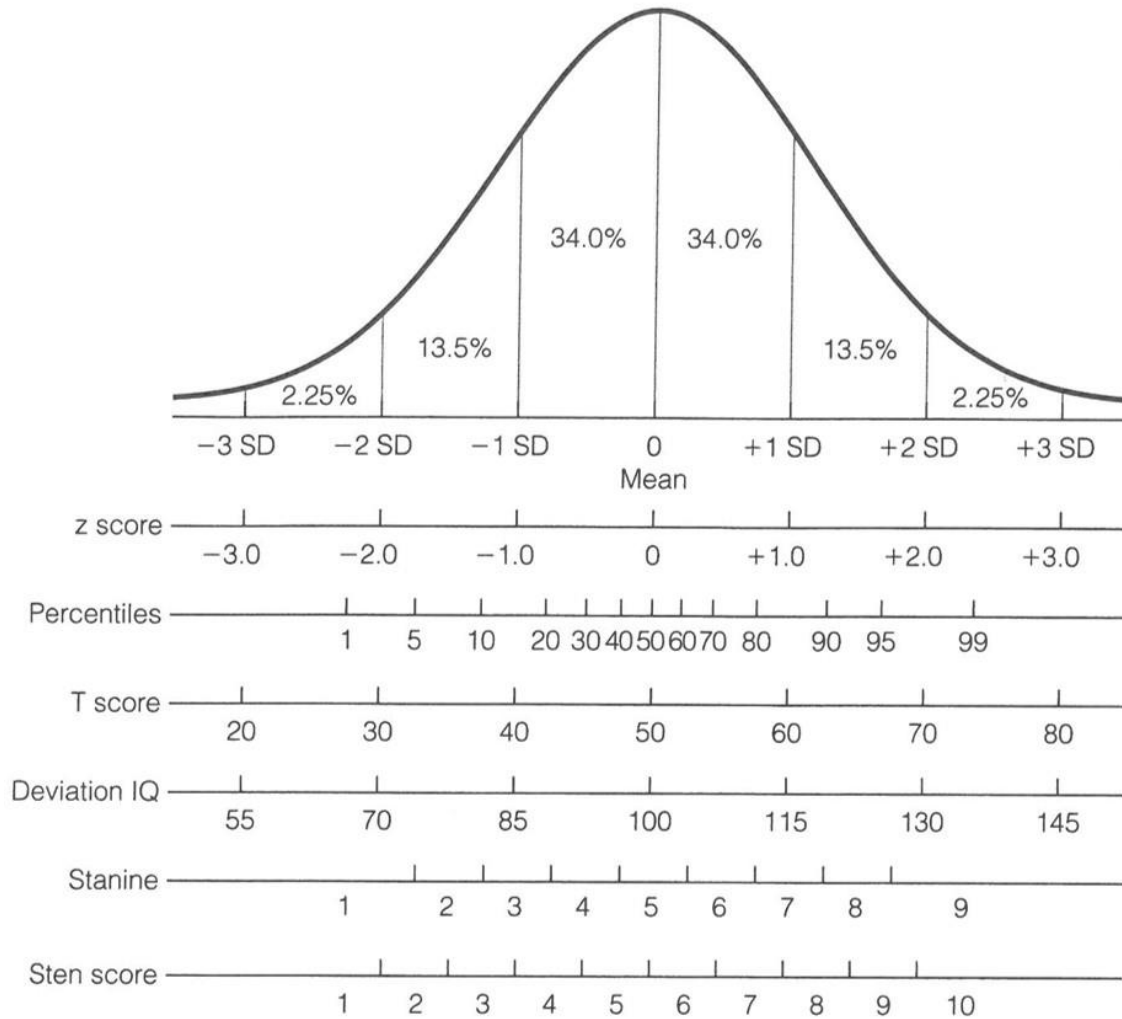
Medulla Oblongata

The **medulla oblongata** is the most primitive part of the brain. It is the control center for our basic life-support systems: respiration, blood pressure, heartbeat, etc.

Statistics

Because working as a Psychometrist involves quantifying things that are otherwise difficult to measure, it is important to have at least a rudimentary grasp of statistics. Most tests provide raw scores which must be converted to Standard Scores before the information can be useful.

Below is a chart taken from *Essentials of Testing & Assessment* by Neukrug and Fawcett to provide a visual reference of different types of scores and how they relate.



Average:

- **Mean:** obtained by adding a set of numbers and dividing by the numbers added
 - (ex. $10+5+15+10=40$ then $40/4=10$ is the mean)
- **Mode:** The most commonly occurring number from a set of numbers
 - (ex. of $10+5+15+10$, because 10 is listed twice, 10 is the mode)
- **Median:** The middle value when a list of numbers is written in numeric order
 - (ex. 5, 10, 10, 15, because 10 is in the middle, 10 is the mode)

Error Variance: Indicates how much random fluctuation is expected within scores and often forms part of the denominator of test statistics.

Confidence Interval: A range of values so defined that there is a specified probability that the value of a parameter lies within it.

Percentile: A percentile score gives the number of people who fall at or below a score.

Raw Score: The untreated score, before being manipulated into a Standard Score as is done for all norm referenced tests.

Scaled Score: A scaled score is a raw score that has been converted onto a consistent and standardized scale.

Standard Score: Is derived by converting the raw score to a score that has a new mean and standard deviation

Standard Deviation: A measure of variability that describes a score's distance from the mean. The Standard Deviation is the square root of the Variance.

Stanine (Standard Nine): A standard score with the mean of 5 and a Standard Deviation of 2.

Sten Score (Standard Ten): A standard score with the mean of 5.5 and a Standard Deviation of 2.

T-Score: A T-Score has a mean of 50 and a Standard Deviation of 10. A T-Score is converted from a Z-Score by multiplying the Z-score by 10 and adding 50.

Z-Score: A Z-Score has a mean of 0 and a Standard Deviation of 1. It is calculated by subtracting the mean from the raw score and dividing that answer by the standard deviation. (ex. raw score =15, mean = 10, standard deviation = 4. Therefore 15 minus 10 equals 5. 5 divided by 4 equals 1.25. Thus the z-score is 1.25.)

Standard Error of Measurement: Refers to the test, not the client. It is derived by taking the square root of 1 minus the reliability and multiplying that number by the standard deviation of the desired score.

CSP Exam Tips and Suggestions

Remember that the test will cover all populations and conditions.

**You are being certified for proficiency in your profession,
not proficiency in your job.**

Content Outline

The following is a detailed outline of the four major content areas of the examination, with an indication (in parentheses) of the approximate percentage of the examination devoted to each area.

I. Pre-testing (18%)

- *Review patient records to obtain information on how to proceed with evaluation.*
- Prepare testing environment to ensure patient safety and maintain standardization and gross neuroanatomy.
- Review test materials and manuals needed to prepare for the administration.
- *Interview patient to obtain background information, determine readiness for testing, establish rapport, confirm appropriateness of tests selected; prepare patient and family for the evaluation (e.g., purpose, duration, process).*

II. Test Administration (55%)

- Knowledge of the administration and scoring of tests in a standardized manner to validly perform and execute planned evaluation.
- Monitor patient performance and behavior to determine need for modification to planned evaluation.
- Monitor patient safety to protect patient and Psychometrist.
- Score tests to obtain results of the evaluation.
- Record behavioral observations to provide additional data and validity for the evaluation.

III. Post-Testing (22%)

- Convert raw data to normative data to provide information for interpretation and statistical comparisons.
- Review integral behavioral observations and test observations data to provide information and recommendations for interpretation.

IV. Ethical / Professional / Legal Issues (5%)

- *Psychometrists practice their profession in an objective manner consistent with applicable published codes of ethics. They protect patient confidentiality and the security of tests and copyrighted materials.*

Before taking the exam

- Study well in advance and in small increments. Cramming is not an effective study method.
- If you have never hand-scored the WAIS/WMS, WCST, MMPI, etc. please do so to better your understanding of the scoring process.
- Know what tests purport to measure and to which age group.
- Form a study group with other psychometrists.
- Know the difference between the standard testing procedure for the exam and the procedures you may use in your lab.
- Study the Code of Ethics for Certified Specialists in Psychometry, the APA Code of Ethics, the Code of Ethics by the NBCC and the ACA Code of Ethics. Understand their intent and how they apply to psychometry.
- Study neuroanatomy no further than understanding the primary regions of the brain – such as the lobes. Understand how each lobe contributes to human brain functioning as well as which tests lateralize to these regions.
- You will not need to know statistical formulas, but you do need to know how scores relate.
- Use a mnemonic to remember more difficult things.
- There are no trick questions; however, you should be alert for phrasing such as always, only, and never.
- Every psychometrist surveyed administers/scores the WAIS and WISC, so you are guaranteed to have questions regarding these measures on the exam. Understand the subtests and indices, and know their acronyms.
- The more obscure tests may not even be on your exam. Focus on the better-known measures, but try to have a general knowledge of the exams on this list.
- Understand the use of the Revised Comprehensive Norms for the Halstead Reitan Book for calculating education level. Education level calculation is something we need to do, and the HRB is a good source for guidelines on this.

During the exam

- Have a healthy breakfast before the exam – but not too heavy as this may cause a paradoxical effect making you drowsy.
- Arrive early, on-time at the latest.
- Get seated and comfortable in your seat/location.
- Talk to others before the exam and ask how they prepared.
- Use the restroom before the doors close.
- Read each question and answer it in its entirety.
- Do not read too much into the question – but make sure you understand what is being asked.
- In general, answer ethical questions in terms of protecting the patient.
- There is no penalty for guessing.
- Cross-out answers in the exam booklet you know are wrong to narrow your remaining choices.
- Try restating a question in your own words to better understand what is being asked.
- Answer in terms of how tests should be administered and scored and not only as they are administered in your office.
- Take your best guess while you can and mark it as an item to return to later (in the test question booklet).
- Try not to second-guess the intent of the question – the item was written by a psychometrist just like you.
- Expect there to be questions you do not know. Take your best educated guess on those items.

- It may help to draw a normal bell curve in your exam booklet with the statistical values for reference when you need them.
- There are no “all of the above,” “none of the above,” or True or False answers – only A, B, C or D.
- On long questions, read the answers first.
- Take the full time available if needed.
- Check the questions you marked as ones you want to review after completing the exam.
- Keep hydrated. Bottled water is allowed in the exam.
- Wear layers so you can adjust your temperature to the room environment that may vary.
- Use ear plugs if necessary.
- Make sure you are marking the correct question on the answer sheet. If you choose to skip around the test, you might want to wait until you have chosen all of your answers before marking the answer sheet at all.
- Wear a watch to help you keep track of the time if you are in a position where you aren’t able to see the official clock, but make sure your watch is set so that it won’t make noise during the exam time.

Sample Examination Questions

(Disclaimer: These items are representative of the types of items found on the examination but not necessarily representative of overall examination content. Some items may have been on the exam in the past and are retired items. You may also see “scenario” type questions where you are given information which you will use to answer multiple questions.)

- 1) Upon the completion of testing, the client asks you for feedback regarding performance and/or diagnosis. Your best response is to:
 - a. inform the client that the supervising psychologist will provide feedback.
 - b. reassure the client and indicate that test performance was “fine.”
 - c. provide a provisional diagnosis but defer interpretation and recommendations to the supervising psychologist.
 - d. provide interpretive information on the client's performance but defer diagnosis to the supervising psychologist.

- 2) A score from a distribution with a mean of 50 and a standard deviation of 10 is called a:
 - a. z-score.
 - b. T-score.
 - c. stanine score.
 - d. scaled score.

- 3) Anomia, the impaired ability to name objects or retrieve words, is a form of:
 - a. anoxia.
 - b. ataxia.
 - c. aphasia.
 - d. apraxia.

- 4) When assessing a patient with a history of frontal lobe injury, you can expect the patient to be:
 - a. paraphasic, confused, and disoriented.
 - b. overly cooperative, docile, and passive.
 - c. selectively mute, inattentive, and indecisive.
 - d. disinhibited, easily frustrated, and inflexible.

- 5) A patient you are testing is constantly distracted and interrupts you, saying things like “That reminds me of the time...,” or “Let me tell you a story about that.” This behavior is best described as:
 - a. tangential.
 - b. perseverative.
 - c. intrusional.
 - d. distractible.

- 6) When administering a list-learning task, the patient reports a word that is not on the target list. What type of error is this?
- Perseveration
 - Intrusion
 - Substitution
 - Insertion
- 7) If a research study includes a population in which the potential subject may not have sufficient decisional capacity to provide informed consent, what should the investigator do prior to enrolling the participant?
- Discuss the study with the family and have the family/guardian consent for the participant
 - Use an Investigational Review Board (IRB) approved process for assessing and documenting capacity and obtaining surrogate consent
 - Get a second opinion from a qualified investigator to agree that the participant meets study criteria
 - Assess capacity and only enroll subjects who have sufficient capacity to provide informed consent
- 8) Informed consent requires all of the following EXCEPT:
- Being informed of both positive and negative consequences
 - Being informed of negative consequences
 - Establishing mental sanity and/or competence
 - Giving consent voluntarily
- 9) The test format with the least reliability is:
- Essay
 - True – False
 - Multiple choice
 - Fill in the blank
- 10) A psychometrist should know a patient's hand dominance because:
- You would expect a difference in hand strength
 - It may determine which hand to use first on a particular task
 - You would expect no difference in hand strength
 - It does not matter; hand dominance has no influence on the test administration
- 11) Best practices regarding use of clinical terminology during an interview and testing state:
- Use it discriminately if you feel it will add value to the assessment
 - Use it often, especially with intelligent clients
 - Never use it
 - Minimize its use

- 12) Pseudoseizures are more closely related to:
- Blatant malingering
 - Anti-convulsant toxicity
 - Fronto-temporal generalized seizures
 - Conversion disorders
- 13) A personality change from a brain injury is most commonly associated with which lobe?
- Frontal
 - Temporal
 - Parietal
 - Occipital
- 14) The administration rules of some tests allow psychometrists to begin with items other than the first one. What is one reason for this procedure?
- The hardest items can be dealt with first.
 - It shortens testing time.
 - It establishes rapport.
 - It motivates the patient.
- 15) Maximal is to typical as:
- Personality is to IQ
 - Feeling is to performance
 - IQ is to personality
 - Best is to effort
- 16) Which WAIS-IV subtest is most sensitive to the effects of aging?
- Similarities
 - Letter-Number sequencing
 - Information
 - Digit Span Forward
- 17) Which measure is appropriate to administer after the last immediate recall trial of a verbal list learning task?
- DKEFS or RUFF Verbal Fluency Test
 - Phonological Processing (NEPSY-II) or COWAT
 - CPT-3 or CATA
 - WAIS-IV Vocabulary or WTAR
- 18) On a naming task, if the patient responds to an item that is a chair stating it is a "couch" this response is a:
- phonemic paraphasia.
 - circumlocution.
 - semantic paraphasia.
 - neologism.

- 19) The _____ is located under the skull and is a thick and durable membrane containing a double layer of connective tissue.
- a. arachnoid
 - b. pia
 - c. dura
 - d. brain stem

20) The WCST and CAT are measures of:

- a. cognitive functioning.
- b. executive functioning.
- c. tactile skills.
- d. visual perception.

Correct Answers:

1) a, 2) b, 3) c, 4) d, 5) a, 6) b, 7) b, 8) c, 9) b, 10) b, 11) d, 12) d, 13) a, 14) b, 15) c, 16) b, 17) c, 18) c, 19) c, 20) b

Terms to know for Observation

TERM	NOTES
Affect	
Agraphia/dysgraphia	
Acalculia/dyscalculia	
Circumlocution	
Cochlear implant	
Confabulation	
Dysarthria	
Dysnomia	
Dyspraxia	
Echolalia	
Intrusion	
Malingering	
Mania/hypomania	
Micrographia	
Neologism	
Paraphasia	
Perseveration	
Practice effect	
Pressured Speech	
Primacy Effect	
Prosody	
Recency effect	
Response latency	
Semantic cluster	
Telegraphic speech	

Terms to know for Diagnostic Considerations

TERM	NOTES
ADD/ADHD	
Akinesia/dyskinesia	
Alexia	
Alzheimer's	
Amnesia	
Anhedonia	
Aneurysm/embolism	
Aphasia/dysphasia	
Asperger's	
Ataxia	
Autism	
Bradykinesia	
Cerebral Palsy	
Cerebrovascular Accident/Stroke	
Dementia	
Down's Syndrome	
Encephalopathy	
Epilepsy	
Fetal Alcohol Syndrome	
Hemianopia	
Hemiparetic	
Histrionic	
Intellectual Disability	
Korsakoff Syndrome	
Learning Disability	
Lesions	
Multiple Sclerosis	

Organic Brain Syndrome	
Parkinson's disease	
Premorbid	
Prosopagnosia	
Seizures	
Absence	
Grand Mal	
Tonic	
A-Tonic	
Tangential speech	
Telegraphic speech	
Tremor	
Intentional	
Resting	
Shaken Baby Syndrome	
Sundown Syndrome	
Tardive Dyskinesia	
Tourette's Syndrome	
Tics	
Vocal	
Fine motor	
Gross motor	
Traumatic brain injury	
Visual agnosia	

Tests to Study

It will be important to know

- Tests by their acronyms
- Test functions and age range
- Abbreviations for the subtests and indices on the Weschler tests
- The difference between Aptitude tests and Achievement Tests

Below are *some* tests that *may* be on the CSP examination.

TEST NAME	AGE RANGE	NOTES
Advanced Clinical Solutions (ACS) Social Cognition Effort Test of Premorbid Functioning (ToPF)		
Aphasia Screening Test (AST)		
Bayley Scales of Infant Development (BSID)		
Beck Anxiety Inventory (BAI)		
Beck Depression Inventory - (BDI)		
Boston Naming Test (BNT)		
California Verbal Learning Test (CVLT)		
Category Test (CT) & Booklet Category Test (BCT)		
Child Behavior Checklist (CBC) (a.k.a. Achenbach)		
Continuous Performance Test (CPT)		
Controlled Oral Word Association Test (COWAT / COWA)		
Delis-Kaplan Executive Functioning Scale (DKEFS)		
Dementia Rating Scale (DRS)		
Dot Counting Test (DCT)		
Facial Recognition Test (FRT)		
Geriatric Depression Scale (GDS)		
Grip Strength (Dynamometer)		
Grooved Pegboard Test (GPT)		

Halstead-Reitan Neuropsychological Test Battery (HRB) – Adult, Older Children & Younger Children Finger Tapping Test Lateral Dominance Test Rhythm Test - Seashore version Sensory Perceptual Exam Speech Perception Test (SPT) Tactile Form Recognition Test (TFR) Tactual Performance (TPT) - children through adult		
Hooper Visual Organization Test (HVOT)		
Judgment of Line Orientation Test (JOLO)		
Memorization of 15-items (aka Rey 15-Item Memory Test; Rey's Memory Test) (RMT)		
Millon Clinical Multiaxial Inventory - (MCMI)		
Mini Mental Status Exam (MMSE)		
Minnesota Multiphasic Personality Inventory - (MMPI-2 / MMPI-A)(+RF)		
Montreal Cognitive Assessment (MoCA)		
Nelson-Denny Reading Test		
North American Adult Reading Test - Revised (NART; NAART)		
Paced Auditory Serial Addition Test - (PASAT)		
Peabody Picture Vocabulary Test - (PPVT)		
Personality Assessment Inventory (PAI)		
Recognition Memory Test (RMT) – aka Warrington		
Repeatable Battery for the Assessment of Neuropsychological Status (RBANS)		
Rey Auditory Verbal Learning Test (RAVLT)		
Rey-Osterrieth Complex Figure Test (RCF or RCFT) - including Taylor version		
Rorschach		
Smell Identification Test (UPSIT / SIT)		
Stanford-Binet (SB)		
State-Trait Anxiety Inventory (STAI)		

Stroop		
Symbol Digit Modalities Test (SDMT)		
Test of Memory Malingering (TOMM)		
Test of NonVerbal Intelligence (TONI)		
Tokens Test (TT)		
Trail Making Test (TMT) - color, adult, and intermediate		
Victoria Symptom Validity Test (VSVT)		
Vineland Adaptive Behavior Scales (VABS)		
Visual Object and Space Perception Battery (VOSP)		
Wechsler Abbreviated Scale of Intelligence (WASI)		
Wechsler Adult Intelligence Scales - (WAIS)		
Wechsler Individual Achievement Test – (WIAT)		
Wechsler Intelligence Scales for Children – (WISC)		
Wechsler Test of Adult Reading (WTAR)		
Wechsler Memory Scale – (WMS)		
Wide Range Achievement Test – (WRAT)		
Wide Range Assessment of Memory and Learning - (WRAML)		
Wisconsin Card Sorting Test (WCST) – both the PC and manual card versions		
Word Memory Test (WMT)		

References

- A. I. (2006). The use, education, training and supervision of neuropsychological test technicians (psychometrists) in clinical practice. Official statement of the National Academy of Neuropsychology. *Archives of Clinical Neuropsychology: The Official Journal of the National Academy of Neuropsychologists*, 21(8), 837-839.
- Axelrod, B., Heilbronner, R., Barth, J., Larrabee, G., Faust, D., Pliskin, N., & ... Silver, C. (2000). The use of neuropsychology test technicians in clinical practice: official statement of the National Academy of Neuropsychology. Approved 5/15/99. *Archives of Clinical Neuropsychology: The Official Journal of the National Academy of Neuropsychologists*, 15(5), 381-382.
- Blumenfeld, H. (2002). *Neuroanatomy through clinical cases*. Sunderland, MA: Sinuaer Associates, Inc.
- Festa, J. R., Barr, W. B., & Pliskin, N. (2010). The politics of technicians. *The Clinical Neuropsychologist*, 24(3), 506-517. Doi: 10.1080/13854040802531463
- Filly, C. M. (1999). Behavioral neurology for neurologists (Course 37). 19th NAN conference presentation.
- FitzGerald, M. J. T., Folan-Curran, J. (2002). *Clinical neuroanatomy and related neuroscience*. (4th Ed.). Edinburgh, UK: W. B. Saunders.
- Gertz, S. D. (1996). *Liebman's neuroanatomy made easy and understandable*. Gaithersburg, MD: Aspen Publishers, Inc.
- Kolb, B., Whishaw, I. Q. (2009). *Fundamentals of Human Neuropsychology*. (6th Ed.). New York, NY: Worth Publishers.
- Lezak, M. D., Howieson, Loring, D. W. (2004). *Neuropsychological assessment*. (4th Ed.). New York, NY: Oxford University Press.
- Midbrain anatomy. (2018). In *Encyclopedia Britannica online*. Retrieved from <https://www.britannica.com/science/midbrain>.
- Puente, A. E., Adams, R., Barr, W. B., Bush, S. S., Ruff, R. M., Barth, J. T., & Tröster, Smith, R. and Schuler, P. (2011). *Aphasia: Classification, assessment, TBI & stroke*. NAP Annual Conference presentation.
- Spreen, O., Strauss, E., & Sherman, E. M. (2006). *A compendium of neuropsychological tests: Administration, norms, and commentary*. New York: Oxford University Press.
- The use of neuropsychology test technicians in clinical practice. (2000). *Archives of Clinical Neuropsychology*, 15(5), 381-382.