NCSF™

NATIONAL COUNCIL ON STRENGTH & FITNESS

Annual Report

BACKGROUND

The National Council on Strength and Fitness (NCSF) is a professional, member-driven, education and credentialing organization for personal trainers and exercise science professionals. The NCSF is committed to serving the public through research, service, and advancement of the certified strength coach profession.

The NCSF sponsors the Certified Personal Trainer examination. The purpose of this report is to document the test and item analysis performed by Prometric Assessment Services in an effort to evaluate the psychometric quality of the examination for the year 2024. The report also provides results from the comparison of the performance of candidates who tested at Prometric's test centers and those testing through a remote proctoring platform, *ProProctor*.

COMPREHENSIVE TEST DEVELOPMENT

In cooperation with Prometric Test Development Solutions, the NCSF develops and administers a legally defensible, psychometrically sound examination. The processes and procedures used to develop and maintain these exams are summarized in the table below.

Test Design	Job Analysis	Define the tasks, knowledge, and skill important for performing the specified role
	Test Specifications	Subject matter experts (SMEs) review the importance and determine how many items should be written to each objective
	Test Definition	Defines the purpose, scope, target population, general topics, duration, number of forms, number of items and types of items
Item Development	Item Writing	Provide training on item writing to meet the test specifications and amounts listed in the blueprint
	Technical Item Reviews	Review items for language and technical accuracy
Psychometrics	Item Analysis	Compute statistics that measure item performance
	Item Selection	Assign items for inclusion on final forms, discarding or rewriting
	Form Assembly	Distribute items across forms so that each form meets the specifications of the blueprint plan and remain equally difficult
	Beta Test	Evaluate items and examinations before scored use
	Standard Setting	Set the cut score
In-service	Maintain Exams	Conduct ongoing analysis of item and test statistics and revise test periodically

TEST DESIGN: CONDUCTING A JOB ANALYSIS STUDY TO DETERMINE TEST SPECIFICATIONS

NCSFBC test design process starts by conducting a job analysis. Job analysis is designed to determine the tasks performed on a job as well as the critical knowledge and/or skills needed to adequately perform those tasks. For purposes of developing NCSF examinations, the job analysis identified important tasks and knowledge necessary for competent performance as a personal trainer. Job analysis is also a highly appropriate and useful method for gathering information to inform continuing education and professional development efforts.

ITEM DEVELOPMENT: VALID PROCESSES FOR DEVELOPING TEST ITEMS

The NCSF and Prometric work together to write relevant examination items and construct valid test forms according to the approved test specifications. Prometric test developers assists NCSF subject-matter experts in writing and reviewing exam items to achieve the following outcomes:

- The option indicated as the item key has been correctly identified.
- The language of each item is clear and unambiguous.
- The item is appropriately classified in terms of the test plan or blueprint; and valid references have been provided.
- Items are appropriately difficult and not encumbered with irrelevant sources of difficulty (such as inappropriately complex sentence construction or difficult vocabulary).
- Items are free from content inaccuracies.
- Language, symbols, words, phrases, or examples that can be regarded as sexist, racist, or otherwise potentially offensive, inappropriate, or negative toward any group is identified and removed. Additionally, each item is reviewed for possible bias in language or social context.

PSYCHOMETRICALLY SOUND TEST CONSTRUCTION PROCESSES FOR VALID EXAMS

NCSF approved examination items are assembled into multiple test forms in accordance with the pre-determined test specifications, ensuring that the appropriate number of items from each knowledge, skill or ability area is incorporated into each form. As one or more test forms are assembled, pretest and operational test item data is used to anticipate the statistical characteristics of each form. This data is used to verify adequate test functioning and test form comparability. Test analysis assures that test forms exhibit expected pass rates, adequate reliability and pass/fail decision consistency, tolerable measurement error, expected item response consistencies and interrelationships between test parts, adequate response times and comparability between forms. These attributes are critical to valid interpretation and use of test scores.

NCSF Form Assembly and Item Selection Criteria

After the completion of standard setting, the cut scores for subsequent NCSF (CPT and CSC) exam forms are determined using a section pre-equating method.

THE CERTIFIED PERSONAL TRAINER EXAM

The Certified Personal Trainer exam (CPT) is a computer-based test. Candidates need to complete the examination within 180 minutes. A total of two forms (i.e., Form NCPT202301 and Form NCPT202302) were administered in 2024. Each CPT form consisted of 150 multiple-choice items each, 125 of which were scored and 25 were unscored. The cut scores to pass the exam were 76 on Form NCPT202301 and 75 on Form NCPT202302.

Table 1. NCSF CPT Exam Summary Test Statistics (January 2024 - December 2024)

	NCPT202301	NCPT202302
Number of candidates	1,228	1,231
Proportion passing	0.85	0.84
# of operational Items	125	125
Maximum score	123	124
Median score	97	97
Minimum score	16	15
Mean score	93.71	93.44
Standard Deviation of scores	17.4	18.54

SUMMARY OF STATISTICAL ANALYSIS

The overall passing rate for the NCSF CPT exam in 2024 was about 84.5%. The average total raw scores of the NCSF CPT exam were 93.71 for Form NCPT202301, and 93.44 for Form NCPT202302. The standard deviations of the total raw score were 17.4 and 18.54, respectively. The reliability coefficients of the NCSF CPT exam forms in 2024 were 0.94 and 0.95 respectively for forms NCPT202301 and NCPT202302. The SEMs for the two forms showed to be stable and acceptable in comparison with the previous year's outcomes.

THE CERTIFIED STRENGTH COACH EXAM

The Certified Strength Coach (CSC) exam is a computer-based test. Candidates need to complete the examination within 180 minutes. One form (NCSC202301) was administered in 2024. Form NCSC202301 consisted of 150 multiple-choice items, 125 of which were scored and 25 were unscored. The cut score to pass the examination was 75 of operational items.

Table 2. NCSF CSC Exam Summary Test Statistics (January 2024 - December 2025)

	NCSC202301
Number of candidates	234
Proportion passing	0.71
# of operational Items	125
Maximum score	118
Median score	86
Minimum score	9
Mean score	85.01
Standard Deviation of scores	19.41

SUMMARY OF STATISTICAL ANALYSIS

The passing rate for the NCSF CSC exam in 2024 was about 71.4%. The average total raw score was 85.01, and the standard deviation of the total raw score was 19.41. The reliability coefficient of the NCSF CSC exam in 2024 was 0.94 and the SEM for the exam appeared to be stable and acceptable from the comparison with the previous year's outcomes.