

# PSYCHOMETRICS

## of Accreditation.....

The goal of each of our certification programs is to validate the professional knowledge and skills of certified individuals as they relate to psychotherapy. Psychometricians assist in achieving this goal. Nate Thompson is a psychometrician, a professional who is contracted with various organizations to align their certification programs with accreditation practices. He consented to answer some questions about accreditation and psychometrics. Read on to discover more about psychometrics and how it prepares us to apply for accreditation for our certification programs.

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### WHAT IS PSYCHOMETRICS?

Psychometrics is the science of measurement generally applied to education, psychology, and professional skills. Decades of academic and applied research have gone into developing best practices for processes that many take for granted but are actually quite complex, such as how to decide what topics go on an exam and how to set the cutscore (more info below). A person that works with psychometrics is called a psychometrician. They typically have a PhD in a field such as educational psychology.

### WHY IS PSYCHOMETRICS IMPORTANT FOR A CERTIFICATION EXAM?

Psychometrics is applied specifically to certification tests in several ways. The outline/blueprints for the test are developed using a technique known as job task analysis or practice analysis, which often surveys experts in the field to see what they consider the most important topics in that field. Next, test questions are written and reviewed according to professional standards. A cutscore is then set using one of several quantitative techniques that utilize another sample of experts. Lastly, test data is statistically analyzed to see if any questions are too difficult or otherwise confusing, which helps ensure reliable scores and supports the validity of the test. Additionally, formal reports of all these processes must be written and then submitted to gain accreditation.

### HOW ARE CERTIFICATION EXAMS DEVELOPED?

Our certification exams are developed using processes based on scientific research and best practices as defined by the National Commission for Certifying Agencies (NCCA). All exams must face a rigorous path, meeting the following requirements for developing a psychometrically-sound exam:

**JOB ANALYSIS STUDY:** This is an empirical survey of experienced professionals to see what tasks and knowledge are most essential to the field. In the BCPC program, experts are currently analyzing job task statements to complete the Job Analysis Study.

**TEST BLUEPRINT:** The Job Analysis Study results are statistically analyzed to develop the Test Blueprint so that more important tasks get more weight on the exam.

**ITEM DEVELOPMENT:** All test questions are developed by experts, reviewed by at least one other expert, and pilot tested on a small sample of candidates to ensure the questions are top quality.

**STANDARD SETTING STUDY:** A panel of experts assign each item a difficulty rating, which is then compared to the pilot sample results to set a fair cutscore.

## An Interview with Psychometrician Nate Thompson



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Accreditation is the process by which a credentialing program is evaluated against defined standards, and when in compliance with these standards, is awarded recognition by a third party. **THE AMERICAN PSYCHOTHERAPY ASSOCIATION**

is currently aligning certification programs with NCCA standards in anticipation of applying for accreditation through NCCA for its certifications.

The Institute for Credentialing Excellence is a prestigious organization dedicated to providing educational, networking, and advocacy resources for the credentialing community. ICE's accrediting body, the National Commission for Certifying Agencies (NCCA), evaluates certification organizations for compliance with the NCCA Standards for the Accreditation of Certification Programs. NCCA's Standards exceed the requirements set forth by the American Psychological Association and the U.S. Equal Employment Opportunity Commission. ICE is a nationally recognized standards developer.

### WHO DECIDES WHAT A PASSING OR FAILING SCORE IS?

The cutscore for each test is not assigned arbitrarily (e.g., 70 or more is always passing), but by an empirical study that gathers the consensus of a panel of experts. The experts painstakingly review each item and assign a difficulty rating, which is statistically analyzed and compared to actual test results from a pilot sample. This information is then combined to select a cutscore that is rigorous but fair. The process as a whole is known as the modified-Angoff method.

### HOW DO I KNOW THAT CERTIFICATION PROGRAMS MEET INDUSTRY STANDARDS?

The National Commission for Certifying Agencies (NCCA) provides accreditation of professional certification programs, providing a stamp of approval that the entire program—not just the exam itself—is of high quality. Numerous reports and other documentation must be submitted to an impartial review board.

## Nate THOMPSON



**NATE THOMPSON** is the Vice President of Assessment Systems Corporation, a leading provider of technology and psychometric solutions to the testing and assessment industry. He has a decade of experience in psychometrics and test development, having worked both at a client testing organization and in the consultant's role. He oversees consulting and business development activities at ASC, but is primarily interested in the development of software tools that make test development more efficient and defensible. He is also interested in the education of psychometrics, and is adjunct faculty at the University of Cincinnati.

Dr. Thompson received a PhD in Psychometric Methods from the University of Minnesota, with a minor in industrial/organizational psychology. He also holds a BA from Luther College in Decorah, Iowa, with a triple major in latin, mathematics, and psychology. He is a member of the National Council on Measurement in Education and the International Association for Computerized Adaptive Testing and maintains a research program on computerized testing.