

Supervised Administration of Neuropsychological Tests in Sports: A Position Statement of the Sports Neuropsychology Society

The position of the Sports Neuropsychology Society (SNS) is that the administration of clinical tests, including computerized concussion baseline testing, should be supervised by a trained healthcare professional. Supervision of test administration by an appropriately trained healthcare professional is necessary when using any neuropsychological test, including those administered by computer, to ensure validity of results and comply with long established test standards¹ and ethical guidelines² for practice.

After an athlete sustains a concussion, neuropsychological test results are compared often to pre-injury, "baseline" test results to help determine whether the athlete has returned to her or his baseline or pre-injury level of functioning. To make a valid comparison, it is essential that baseline test results are accurate and reflect the true pre-injury functioning of the athlete. Administration of baseline testing should be conducted in a consistent and standardized manner for all athletes and supervised by an <u>individual with proper training and knowledge</u> of the test. Supervised test administration by qualified individuals greatly increases the likelihood of accurate and reliable test results³, which is essential to support clinical decisions to return an athlete to play. This also reduces the risk of endangering the health and safety of the athlete.⁴

Proper supervision and administration of neuropsychological testing, whether baseline or post-injury, are necessary components for ensuring accurate test results by:

- Validating the identity of the athlete
- Ensuring that the test is being taken without undo or inappropriate assistance from others
- Monitoring the testing environment (e.g., lighting, distractions, noise)
- Assessing individual athlete factors that affect test results, such as fatigue, illness at the time of testing, mobility restrictions, etc.
- Determining whether the computer and its accessories are working properly
- Monitoring the athlete's ability to read and follow the test instructions
- Answering the athlete's questions regarding the test and test instructions
- Monitoring the athlete's motivation and effort throughout testing
- Reviewing the test results for accuracy and validity

¹Standards for Educational and Psychological Testing (2014) https://www.aera.net/Publications/Books/Standards-for-Educational-Psychological-Testing-2014-Edition

²APA Ethical Principles of Psychologists and Code of Conduct (2017) https://www.apa.org/ethics/code/

³Vaughan, C. G., Gerst, E.H., BS, Sady, M., et al. (2014). The Relation Between Testing Environment and Baseline Performance in Child and Adolescent Concussion Assessment, American Journal of Sports Medicine. https://doi.org/10.1177/0363546514531732

⁴Moser,R. S., Schatz,P. & Lichtenstein J. (2015). The importance of proper administration and interpretation of neuropsychological baseline and post-concussion computerized testing. Applied Neuropsychology-Child. 4(1):41-48. https://doi.org/10.1080/21622965.2013.791825