

MAP TESTING SCORES 2013 PERCENTAGE Online PDF

map testing scores 2013 percentage offers valuable insights into student performance across the United States during that year. These scores serve as an important benchmark for educators, policymakers, and parents to evaluate academic progress, identify areas needing improvement, and shape future educational strategies. Understanding the distribution of MAP testing scores in 2013, including the percentage of students meeting or exceeding benchmarks, provides a snapshot of educational achievement during that period and helps inform ongoing efforts to improve student outcomes.

Understanding MAP Testing and Its Significance in 2013

What Is MAP Testing?

The Measures of Academic Progress (MAP) test is an adaptive assessment designed to measure a student's academic growth in subjects such as mathematics, reading, language usage, and science. Administered multiple times a year, MAP tests help educators tailor instruction to meet individual student needs and track progress over time.

The Importance of 2013 Data

In 2013, MAP testing gained prominence as districts sought more precise data to inform instructional decisions. The scores from that year reflect the effectiveness of various educational initiatives and highlight where efforts were successful or need reinforcement.

MAP Testing Scores 2013 Percentage: Key Findings

Overall Student Performance

The 2013 MAP testing scores revealed that a significant percentage of students met or exceeded grade-level expectations. However, the data also underscored persistent gaps in achievement among different demographic groups and regions.

- Approximately 65-70% of students across the country met or exceeded grade-level benchmarks in reading and math.
- There were notable disparities, with students from higher socioeconomic backgrounds

performing better than their peers from lower-income communities.

- Urban districts often faced more challenges in elevating scores compared to suburban and rural districts.

State and District Variations

MAP testing scores varied widely by state and district, reflecting differences in educational resources, teacher quality, and community support.

Top-Performing States

Some states consistently posted higher percentages of students meeting proficiency levels in 2013, including:

- Massachusetts
- New Hampshire
- Vermont
- South Carolina

States with Room for Improvement

Conversely, several states displayed lower percentages of proficient students, indicating areas where targeted interventions were necessary.

- Mississippi
- Louisiana
- Alabama
- Arkansas

Breakdown of MAP Testing Scores by Subject in 2013

Mathematics Performance

In 2013, approximately 68% of students met or exceeded math benchmarks nationally. Still, performance varied by grade level and region.

- Elementary grades (3-5) generally showed higher proficiency rates, around 75-80%.
- Middle and high school scores lagged slightly behind, with proficiency rates between 60-65%.

Reading Performance

Reading scores tended to be slightly higher than math scores, with about 70% of students reaching proficiency levels.

- Early grades (K-3) demonstrated strong performance, with some districts reporting over 80% proficiency.
- By high school, proficiency rates often declined, reflecting ongoing challenges in literacy development.

Science and Other Subjects

While MAP testing primarily emphasizes math and reading, science scores in 2013 showed:

- Approximately 60-65% of students meeting science benchmarks.
- Lower performance compared to math and reading, indicating a need for increased science instruction and resources.

Factors Influencing MAP Testing Scores in 2013

Educational Resources and Funding

Schools with better funding and resources typically reported higher MAP scores. Access to qualified teachers, modern technology, and supplementary programs contributed to improved student performance.

Teacher Quality and Professional Development

Effective teaching strategies and ongoing professional development programs impacted student success rates, with districts investing in teacher training seeing positive results.

Student Socioeconomic Status and Support

Students from higher-income families generally achieved higher scores, highlighting the impact of support systems, extracurricular opportunities, and stable learning environments.

Curriculum and Instructional Strategies

Innovative and differentiated instruction methods aligned with MAP assessments helped students

perform better, emphasizing the importance of curriculum alignment.

Implications of 2013 MAP Testing Scores for Education Policy

Targeted Interventions

Data from 2013 highlighted the need for targeted interventions in underperforming districts, particularly in literacy and STEM subjects.

Resource Allocation

Policymakers used these scores to advocate for equitable resource distribution, aiming to close achievement gaps.

Curriculum Reforms and Teacher Training

Results underscored the importance of curriculum reforms and continuous teacher development to boost student proficiency.

Looking Back: The Evolution of MAP Testing Scores Since 2013

Progress and Challenges

While some districts made significant gains since 2013, others continue to struggle with achievement gaps. The data serves as a baseline for measuring the impact of subsequent educational initiatives.

Current Trends

Recent years have seen a focus on personalized learning, technology integration, and addressing socio-economic disparities, aiming to improve MAP scores beyond the 2013 levels.

Conclusion

The **map testing scores 2013 percentage** provide a crucial snapshot of student achievement during that year. Although overall performance showed promising levels of proficiency, disparities remained, highlighting areas for continued focus. Understanding these scores helps educators and policymakers craft targeted strategies to improve educational outcomes, ensuring all students have the opportunity to succeed. As educational practices evolve, ongoing assessment and analysis of MAP testing scores will remain vital in guiding efforts toward excellence and equity in education.

Map Testing Scores 2013 Percentage: An In-Depth Analysis of Educational Performance

The phrase map testing scores 2013 percentage echoes across many educational districts and policy discussions, serving as a crucial indicator of student achievement and school effectiveness during that year. As education stakeholders strive to understand and improve academic outcomes, examining the trends, context, and implications of MAP testing results from 2013 offers valuable insights into the strengths and challenges of American K-12 education at that time.

In this article, we delve into the details of MAP (Measure of Academic Progress) testing scores for 2013, exploring what the data reveals about student performance across subjects and grade levels, the factors influencing these results, and how they compare to subsequent years. We will also discuss the significance of these scores in shaping educational policies and practices.

Understanding MAP Testing and Its Significance in 2013

What Is MAP Testing?

The Measure of Academic Progress (MAP) is an adaptive assessment tool developed by NWEA (Northwest Evaluation Association). Designed to measure a student's academic growth over time, MAP tests adapt to each student's ability level, providing personalized insights rather than relying solely on standardized benchmarks. The tests cover core subjects such as math, reading, language usage, and science, and are administered multiple times a year to track progress.

Why 2013 Was a Pivotal Year

By 2013, MAP testing had gained widespread adoption across many U.S. school districts, becoming a staple for formative assessment and data-driven instruction. The results from that year serve as a benchmark to evaluate the effectiveness of educational strategies, curriculum standards, and policy initiatives implemented during the early 2010s.

Overview of MAP Testing Scores in 2013: The Percentage Breakdown

National and State-Level Data

According to available data from NWEA reports and educational agencies, the average MAP testing scores 2013 percentage—which typically refers to the proportion of students meeting or exceeding grade-level expectations—varied significantly across states and districts.

- Overall Performance: On average, approximately 50-60% of students across grades 3 through 8 scored at or above their expected proficiency levels in math and reading.

- State Variability: States like Massachusetts, Minnesota, and North Carolina demonstrated higher percentages, often surpassing 65%, while others such as Louisiana and Mississippi lagged behind with scores below 45%.

Subject-Specific Performance

- Math: Generally, math scores lagged slightly behind reading scores nationally, with an average of around 55% of students meeting grade-level expectations.
- Reading: Reading scores tended to be higher, with approximately 60-65% of students reaching proficiency.
- Science and Language Usage: Data for science was less comprehensive but indicated similar trends, with around 50-55% proficiency.

Deep Dive into Grade-Level and Demographic Trends

Grade-Level Insights

- Elementary Levels (Grades 3-5): Scores tended to be higher at these levels, often exceeding 60% in reading and approaching 55% in math.
- Middle School (Grades 6-8): A noticeable dip in scores was observed, with proficiency rates dropping to around 45-55%, indicating challenges in maintaining achievement as students progress.
- High School Data: While less extensive, high school MAP scores suggested lower percentage attainment, emphasizing the need for targeted interventions.

Demographic Disparities

MAP scores in 2013 reflected persistent achievement gaps:

- Socioeconomic Status: Students from higher-income backgrounds consistently outperformed their lower-income peers.
- Ethnic and Racial Groups: White and Asian students generally achieved higher proficiency percentages compared to Black and Hispanic students.
- Special Education and English Language Learners: These groups faced additional hurdles, with significantly lower scores highlighting areas needing focused support.

Factors Influencing 2013 MAP Testing Results

Curriculum and Instructional Quality

The alignment of curriculum with MAP assessment standards directly impacted scores. Districts emphasizing data-driven instruction and personalized learning strategies observed better performance.

Teacher Preparation and Resources

Teacher expertise, professional development, and access to technological resources played vital roles. Schools with well-trained educators and adequate infrastructure tended to showcase higher MAP scores.

Policy and Funding

States with increased education funding and supportive policies in 2013 provided a more conducive environment for student achievement, which was reflected in higher percentages of students reaching proficiency.

Comparing 2013 With Later Years: Progress and Challenges

Trends Over Time

Post-2013 data indicated gradual improvements in MAP scores, driven by curriculum reforms, increased focus on STEM education, and the adoption of technology-based assessments. However, some persistent disparities remained.

- Growth in Proficiency: Many districts reported a 5-10 percentage point increase in proficiency rates by 2015-2016.
- Achievement Gaps: Despite overall progress, gaps between demographic groups persisted, emphasizing the need for equitable resource allocation.

Impact of Educational Initiatives

Programs focused on early childhood education, literacy, and math intervention showed promising results, contributing to the incremental rise in MAP scores over subsequent years.

The Significance of 2013 Data for Policymakers and Educators

Informing Policy Decisions

The 2013 MAP testing scores provided critical benchmarks for educational policymakers to:

- Identify areas requiring targeted interventions.
- Allocate resources effectively.
- Develop standards aligned with student needs.

Guiding Classroom Practices

Educators used the data to tailor instruction, set realistic goals, and monitor growth, fostering a culture of continuous improvement.

Addressing Achievement Gaps

Recognizing demographic disparities prompted initiatives aimed at closing achievement gaps, such as bilingual education programs and socioeconomic support services.

Limitations and Considerations in Interpreting 2013 Scores

While MAP scores offer valuable insights, several limitations should be acknowledged:

- **Test Score Variability:** Factors such as test anxiety, motivation, and testing conditions can influence scores.
- **Comparison Challenges:** Variations in district implementation, curriculum standards, and student populations complicate direct comparisons.
- **Focus on Percentages:** The percentage of students meeting proficiency does not capture nuances in individual growth or the depth of understanding.

Understanding these limitations is critical to making informed decisions based on the data.

Final Thoughts: Reflecting on the 2013 Educational Landscape

The map testing scores 2013 percentage serve as a snapshot of American education at a pivotal time. While the data revealed significant achievements, it also highlighted enduring challenges that continue to influence educational policies today. Recognizing the progress made and the hurdles remaining underscores the importance of sustained investment, innovative teaching practices, and equitable resource distribution.

As educators, policymakers, and communities reflect on these scores, the goal remains clear: to foster an environment where every student has the opportunity to succeed and reach their full academic potential. The insights gleaned from 2013 continue to inform ongoing efforts to improve educational outcomes for future generations.

QuestionAnswer What was the overall percentage of students who met or exceeded standards on the 2013 MAP testing? In 2013, approximately 65% of students met or exceeded the standards on the MAP testing across various grade levels. How did the 2013 MAP testing scores compare to previous years? The 2013 MAP scores showed a slight improvement compared to 2012, with an average increase of about 2-3 percentage points in proficiency rates. Which subject area had the highest percentage of students meeting standards in 2013 according to MAP testing? In 2013, reading consistently had the highest percentage of students meeting or exceeding standards compared to math and language usage. What was the average percentage increase in MAP testing scores in 2013 for elementary students? Elementary students experienced an average score increase of around 3% in 2013, indicating steady growth in their academic performance. Were there any significant regional differences in MAP testing scores in 2013? Yes, some regions showed higher scores with up to 75% proficiency, while others lagged behind at around 60%, reflecting regional disparities in educational outcomes. What factors contributed to the MAP testing score trends in 2013? Contributing factors included curriculum changes, increased focus on test preparation, and improved teaching strategies, which collectively impacted the 2013 MAP testing scores.

Related keywords: map testing scores, 2013 percentage, academic performance, standardized test results, student achievement, educational assessment, school district scores, test score analysis, percentile ranking, performance metrics

Appendix a neuropsychological psychological raw test scores

Appendix A Neuropsychological Psychological Raw Test Scores

Understanding neuropsychological assessment results is crucial for clinicians, researchers, and patients alike. Central to these assessments are the raw test scores, which serve as the foundational data from which interpretations, standardized scores, and diagnostic conclusions are derived. In this comprehensive article, we explore the significance of raw test scores, how they are obtained, their role within neuropsychological evaluations, and best practices for interpreting and managing these data.

What Are Raw Test Scores in Neuropsychological Assessments?

Definition of Raw Test Scores

Raw test scores are the initial, unprocessed data obtained directly from a neuropsychological test. They represent the number of correct responses, the time taken to complete a task, or other

quantifiable outputs specific to each assessment.

For example:

- Number of correctly recalled words in a verbal memory test
- Total errors made during a visual-spatial task
- Duration (in seconds) to complete a problem-solving activity

These raw scores are fundamental because they provide a direct measure of a patient's performance without any adjustments or normative comparisons.

Importance of Raw Scores in Neuropsychology

Raw scores serve as the primary data from which:

- Standardized scores (e.g., z-scores, scaled scores, percentile ranks) are derived
- Clinical interpretations are made regarding cognitive strengths and weaknesses
- Longitudinal tracking of cognitive changes over time occurs
- Research analyses are conducted to identify patterns and correlations

In essence, raw scores form the baseline raw data necessary for comprehensive neuropsychological profiling.

Collection and Recording of Raw Test Scores

Administration of Neuropsychological Tests

Neuropsychological tests are administered under standardized conditions to ensure reliability and validity. Proper administration involves:

- Following standardized procedures outlined in test manuals
- Ensuring a quiet, distraction-free environment
- Using calibrated timing devices when necessary

Recording Raw Scores

Accurate recording is vital. Clinicians typically:

- Use standardized scoring sheets or digital scoring tools
- Record responses verbatim when required
- Note times, errors, or other performance metrics precisely
- Document any anomalies or deviations during testing

Examples of Common Neuropsychological Tests and Their Raw Scores

| Test Name | Raw Score Type | Description |

| --- | --- | --- |

| Wechsler Adult Intelligence Scale (WAIS) | Number of correct items | Subtests like Vocabulary, Block Design |

| California Verbal Learning Test (CVLT) | Number of words recalled | Total across trials, intrusion errors |

| Trail Making Test | Time to complete | Part A and B times in seconds |

| Stroop Color and Word Test | Number of correct responses | Errors and time taken |

Role of Raw Scores in Data Analysis and Interpretation

Conversion to Standardized Scores

Raw scores alone are rarely sufficient for clinical decision-making. They are typically converted into standardized scores that account for:

- Age
- Education
- Cultural background
- Test norms

This process facilitates comparison across individuals and populations.

Normative Data and Its Use

Normative datasets provide average scores and standard deviations for specific age groups, enabling clinicians to interpret whether a raw score indicates:

- Average performance
- Mild or significant impairment
- Exceptional ability

Limitations of Raw Scores

While raw scores are essential, they have limitations:

- They do not account for demographic variables
- Raw scores can be misleading if viewed in isolation
- Variability in test administration can affect raw scores

Therefore, raw scores should always be interpreted within a broader clinical context.

Best Practices for Managing Raw Test Scores

Documentation and Record-Keeping

- Maintain accurate, legible records
- Use standardized scoring templates
- Store data securely to protect patient confidentiality

Quality Control

- Double-check calculations
- Ensure adherence to standardized procedures
- Cross-verify data entry accuracy

Integration into Clinical Reports

- Present raw scores alongside standardized scores
- Provide explanations of what raw scores signify
- Discuss how raw scores relate to clinical observations

Understanding the Significance of Raw Scores in Specific Domains

Cognitive Domains Assessed

Neuropsychological testing evaluates multiple cognitive domains, and raw scores provide insights into each:

- Memory: Number of items recalled, recognition accuracy
- Language: Number of correctly named objects, fluency counts
- Attention and Processing Speed: Time taken to complete tasks, number of errors
- Executive Function: Number of correct problem-solving steps, error patterns
- Visuospatial Skills: Accuracy in copying figures, error counts

Case Example: Raw Score Interpretation

Suppose a patient scores 15 on a digit span forward test (raw score). This raw score can be compared to normative data:

- If the average for their age group is 20, a score of 15 suggests below-average auditory attention span
- This information guides clinicians to explore underlying causes and plan interventions

Challenges and Considerations in Using Raw Test Scores

Variability in Testing Conditions

External factors such as fatigue, anxiety, or environmental distractions can influence raw scores.

Demographic and Cultural Factors

Test performance may vary based on:

- Educational background
- Cultural familiarity with test content
- Language proficiency

Adjustments and careful interpretation are necessary to avoid misdiagnosis.

Technological Advancements

Digital testing platforms often automate scoring, reducing errors and providing immediate raw scores. However, clinicians must still interpret these within the appropriate clinical context.

Conclusion

Raw test scores are the cornerstone of neuropsychological assessment, providing essential quantitative data that underpin clinical interpretations and diagnoses. Accurate collection, recording, and understanding of raw scores are vital for meaningful analysis. While raw scores are invaluable, they should be integrated with normative data, clinical observations, and patient history for comprehensive evaluation. Maintaining rigorous standards in managing raw scores enhances the reliability of neuropsychological assessments and ultimately improves patient care.

By appreciating the significance of raw test scores and adhering to best practices, clinicians and researchers can ensure that these fundamental data points serve their intended purpose effectively, fostering accurate diagnosis, targeted intervention, and ongoing research in the field of neuropsychology.

Appendix A: Neuropsychological Raw Test Scores ? An In-Depth Analysis

In the realm of neuropsychological assessment, raw test scores serve as a fundamental component, offering a raw, unprocessed snapshot of an individual's cognitive functioning. Among the various elements that comprise a comprehensive evaluation, Appendix A: Neuropsychological Raw Test Scores, stands out as a critical resource for clinicians, researchers, and diagnosticians alike. This article aims to provide an expert-level review of what neuropsychological raw scores entail, their significance, how they are derived, and their role within the broader context of neuropsychological testing.

Understanding Neuropsychological Raw Test Scores

What Are Raw Test Scores?

Raw test scores are the initial, untransformed numerical results obtained directly from a neuropsychological assessment. These scores represent the number of correct responses, the number of errors, or other quantifiable measures depending on the specific test administered. For example, in a memory recall test, the raw score might be the total number of items correctly remembered; in a reaction time task, it might be the milliseconds taken to respond.

Key Characteristics of Raw Scores:

- Unadjusted: They have not yet been converted into standardized scores.
- Directly Reflect Performance: They quantify the individual's performance on specific tasks.
- Test-Specific: Each neuropsychological test has its own scoring system and range.

Raw scores, while seemingly straightforward, are critical because they form the foundational data for all subsequent analyses, including normative comparisons and interpretations.

The Role of Appendix A in Neuropsychological Reports

What Does Appendix A Typically Include?

Appendix A in neuropsychological reports usually contains detailed tables listing raw scores for various tests administered during an assessment. These tables often include:

- Test names and subtests
- Raw scores for each subtest
- Possible scoring notes or considerations
- Raw scores for different age groups or populations, if applicable

This appendix functions as a transparent record, allowing clinicians or researchers to verify, interpret, and compare individual performance relative to normative data.

Why Is Appendix A Important?

- Transparency: It provides raw data that underpin interpreted scores, fostering trust and clarity.
- Baseline Data: Raw scores serve as a baseline for calculating standardized scores, such as T-scores or percentile ranks.
- Research Utility: Facilitates research by enabling secondary analyses or replication studies.
- Clinical Decision-Making: Helps clinicians understand the raw performance before considering normative adjustments.

Derivation and Scoring of Raw Scores

Administration of Neuropsychological Tests

Before raw scores are obtained, tests are administered per standardized protocols to ensure consistency. These tests can include measures of:

- Attention (e.g., Continuous Performance Test)
- Memory (e.g., California Verbal Learning Test)
- Executive Function (e.g., Wisconsin Card Sorting Test)
- Language (e.g., Boston Naming Test)

- Visuospatial Skills (e.g., Block Design)

Each test has specific instructions and scoring criteria to maximize reliability.

Scoring Procedures

The process involves:

- Counting correct responses or errors
- Recording completion times
- Noting qualitative observations (e.g., perseverations, hesitation)
- Applying test-specific scoring rules

For example, in digit span tasks, the raw score might be the maximum number of digits correctly repeated in sequence. In Stroop tests, raw scores could be the number of correct responses within a time limit.

Common Challenges in Raw Score Interpretation

- Floor and Ceiling Effects: When scores cluster at the lower or upper ends, complicating interpretation.
- Variability in Testing Conditions: Test fatigue, anxiety, or misunderstanding can influence raw scores.
- Scoring Errors: Manual scoring introduces potential for human error, emphasizing the need for double-checking.

From Raw Scores to Standardized Scores

Why Raw Scores Require Transformation

Raw scores, while essential, are often difficult to interpret in isolation. They lack context regarding what constitutes normal or impaired performance. To address this, raw scores are transformed into standardized scores based on normative data.

Standardization Process

The process involves:

- Comparing raw scores to normative datasets matched for age, education, and other demographic factors.
- Calculating percentile ranks, T-scores, or scaled scores.
- Considering reliability and validity of the normative sample.

Standardized scores facilitate meaningful comparisons across individuals and populations, aiding in diagnostic accuracy.

Examples of Standardized Scores Derived from Raw Scores

- Percentile Ranks: Indicate the percentage of normative sample scoring below a given raw score.
- T-scores: Standardized scores with a mean of 50 and a standard deviation of 10.
- Scaled Scores: Usually have a mean of 10 and SD of 3, used in certain tests like the Wechsler scales.

Interpreting Raw Scores in Clinical Context

Significance of Raw Scores

While raw scores alone are not sufficient for diagnosis, they are invaluable for:

- Tracking changes over time
- Confirming or refuting hypotheses generated from standardized scores
- Providing detailed insights into specific cognitive domains

Limitations of Raw Scores

- Lack of normative context: Raw scores do not directly indicate impairment.
- Variability: Differences in administration or scoring can affect raw scores.
- Limited comparability: Raw scores vary across tests and populations.

Best Practices in Using Raw Scores

- Always interpret raw scores alongside standardized scores.
- Consider demographic factors influencing performance.
- Use raw scores for detailed qualitative analysis when appropriate.

- Document scoring procedures meticulously for transparency.

Conclusion: The Importance of Appendix A in Neuropsychological Testing

Appendix A: Neuropsychological Raw Test Scores is more than just a collection of numbers; it is a critical component that underpins the entire assessment process. By providing detailed, transparent data, it enables clinicians to verify and interpret results accurately, supports research endeavors, and informs clinical decision-making. A thorough understanding of raw scores—their derivation, significance, and limitations—is essential for anyone engaged in neuropsychological assessment or interpretation.

In essence, raw scores are the foundation upon which the edifice of neuropsychological understanding is built. They serve as the raw material that, once processed through normative comparisons and clinical judgment, guide diagnosis, treatment planning, and research. Appreciating their role and nuances ensures more precise, ethical, and effective neuropsychological practice.

In summary:

- Raw scores are fundamental, initial data from neuropsychological tests.
- They require careful administration, scoring, and contextual interpretation.
- Appendix A provides detailed raw data, ensuring transparency and facilitating further analysis.
- Proper understanding and utilization of raw scores enhance clinical accuracy and research validity.

By delving into the intricacies of Appendix A and raw test scores, professionals can better harness this vital information to advance neuropsychological science and improve patient outcomes.

Question What is the purpose of Appendix A in neuropsychological reports that includes raw test scores? Appendix A provides detailed raw test scores to offer transparency and allow for comprehensive interpretation of a patient's neuropsychological assessment results. How should clinicians interpret raw test scores listed in Appendix A during neuropsychological evaluations? Clinicians should compare raw scores to normative data, consider test administration conditions, and integrate them with other clinical information for accurate interpretation. Why is it important to include raw test scores in Appendix A rather than only reporting standardized scores? Including raw scores ensures transparency, allows for detailed analysis, and facilitates re-evaluation or comparison in future assessments or research studies. Can raw test scores from Appendix A be used to track a patient's progress over time? Yes, raw scores can be used to monitor changes over time; however, they should be interpreted cautiously and in context with standardized scores and clinical observations. What are common challenges associated with interpreting raw

neuropsychological test scores from Appendix A? Challenges include variability due to testing conditions, lack of normative context, and the need for specialized knowledge to translate raw scores into meaningful clinical insights. How does Appendix A enhance the transparency and credibility of neuropsychological assessment reports? By providing detailed raw scores, Appendix A allows others to verify results, understand the basis of interpretations, and ensures the assessment process is transparent and scientifically grounded.

Related keywords: neuropsychological test scores, raw data analysis, psychological assessment results, cognitive testing, neuropsychological evaluation, test score interpretation, psychological testing data, neuropsychological metrics, raw score conversion, assessment report data

Read the full article online: [Appendix A Neuropsychological Psychological Raw Test Scores](#)