



Increasing Fairness Using the **Naglieri General Ability Tests™**

(Naglieri–Verbal, Naglieri–Nonverbal, and Naglieri–Quantitative)



Learn more





The Challenge

One of the key challenges in gifted identification is accurately recognizing potential across students from diverse linguistic, cultural, racial, ethnic, socioeconomic backgrounds, and varied educational experiences. Many assessments emphasize acquired knowledge, which can narrow the view of student ability. When identification relies heavily on what students have already had the opportunity to learn, it may obscure underlying strengths and limit educators' ability to see the full range of students' potential, particularly among those whose abilities are not yet reflected in achievement.

Our Solution

Authors **Jack A. Naglieri, PhD, Kimberly Lansdowne, PhD, and Dina M. Brulles, PhD**, in partnership with MHS, are thrilled to share the ***Naglieri General Ability Tests™***. These three separate tests measure general ability across verbal, nonverbal, and quantitative content areas, and were developed to ensure fairness. They can also be used separately, providing multiple indicators of gifted performance, and in combination, supplemented by a Total Score. Test directions are provided using language-free, animated instructions. Test items were carefully designed to allow students to solve problems regardless of the language they speak, significantly reduce the demand for advanced academic knowledge, eliminate the need for verbal responses to the test questions, and greatly reduce cultural influences so the tests measure general ability as fairly as possible.

“

The Naglieri General Ability Tests have allowed us to have meaningful conversations with our staff, helping them see that giftedness doesn't mean a student has to be an Einstein or have perfect grades. **The Naglieri has opened doors for so many of our students, allowing them to shine...** We are truly grateful for the impact the [tests have] had on our program and, more importantly, our students' lives.”

-Gifted and Talented Teacher, Texas



Interested in learning more about the authors?
Scan the QR code to visit their website

Measure General Ability from Multiple Perspectives

The **Naglieri General Ability Tests** (**Naglieri–Verbal**, **Naglieri–Nonverbal**, and **Naglieri–Quantitative**) were designed to be used independently or in combination, providing students the opportunity to demonstrate their ability to solve problems using three different types of content.



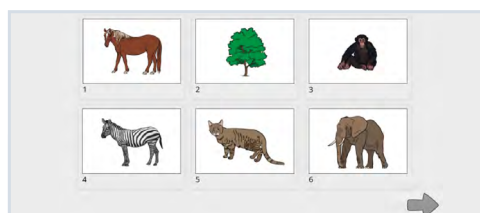
Verbal



Nonverbal



Quantitative



Authors: Jack A. Naglieri, PhD, and Dina M. Brulles, PhD

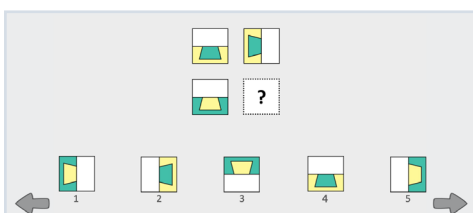
In the **Naglieri–V**, questions require students to understand the relationships among six pictures to determine which one does not represent the verbal concept shared by the other five.

Grades: K-9*

Format: Online

Administration Type: Group

Administration Time:
Approximately 30 minutes



Author: Jack A. Naglieri, PhD

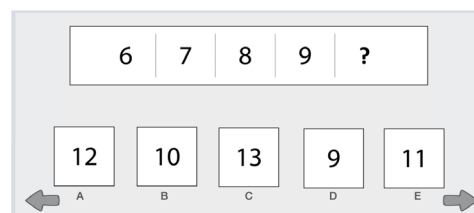
In the **Naglieri–NV**, questions focus on visual relationships and patterns through color, sequence, and orientation, to determine which of the five multiple-choice options best answers each question.

Grades: K-9*

Format: Online

Administration Type: Group

Administration Time:
Approximately 30 minutes



Authors: Jack A. Naglieri PhD, and Kimberly Lansdowne, PhD

In the **Naglieri–Q**, questions require students to reason with mathematical relationships represented by numbers and shapes to determine which of the five multiple-choice options completes the pattern.

Grades: K-9*

Format: Online

Administration Type: Group

Administration Time:
Approximately 30 minutes

*Grade-based local norms available for K-9. Grade-based national norms available for K-6. Age-based norms available locally and nationally, suitable for students aged 5 years 2 months to 14 years 9 months, or approximately K through 9.



Using the Naglieri General Ability Tests has been a game-changer for our G.A.T.E. program. It allows us to fairly identify students with high intellectual abilities without being [unduly influenced] by their language skills or background. The innovative questions, which include verbal, quantitative, and nonverbal tasks, help us see the true potential in every child.”

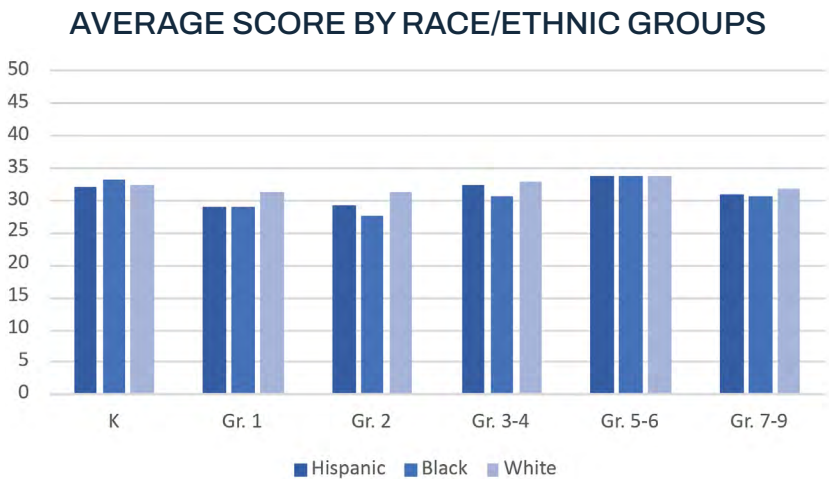
-Gifted and Talented Teacher, Texas

The Results

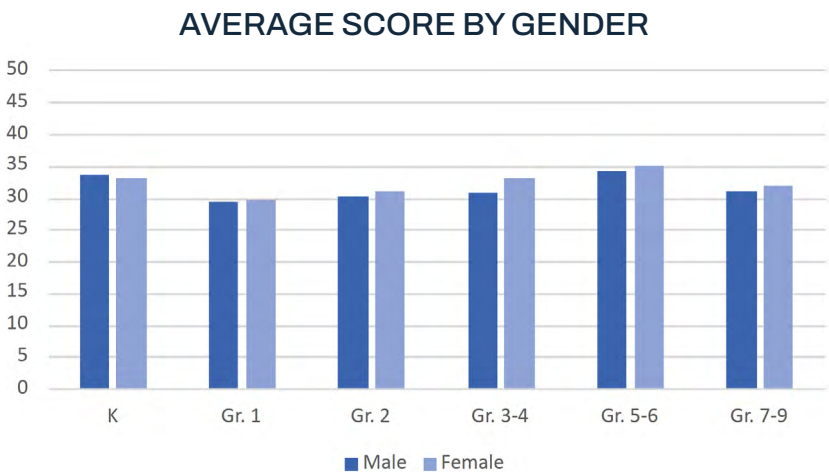
STUDY 1: Naglieri-Verbal

Number of Students: **2,126***

The average scores were very similar and there were no significant differences between Hispanic, Black, and White students on the **Naglieri-V** test.



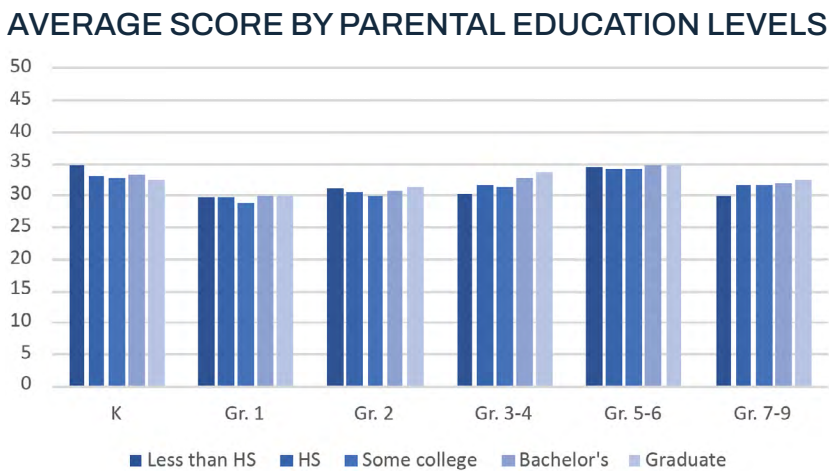
The average scores were remarkably similar across grades with only one significant, but small, difference for the Grade 3-4 group between male and female students on the **Naglieri-V** test.



The average scores were remarkably similar and there were no significant differences found between any of the parental education levels on the **Naglieri-V** test.

Parental Education Levels defined as:

Less than high school diploma (Less than HS), high school graduate (HS), some college or associate's degree (Some college), Bachelor's degree (Bachelor's), and graduate or professional degree (Graduate).



*Tests included 50 items per form distributed across different grade-forms.

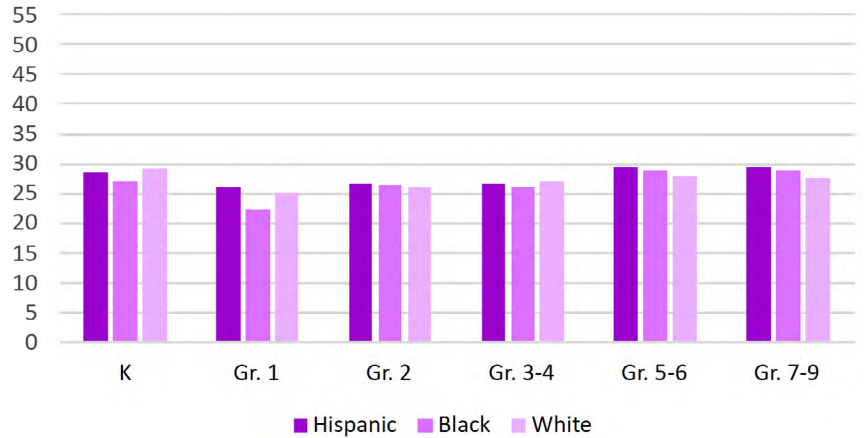
The Results

STUDY 2: Naglieri–Nonverbal

Number of Students: **2,356***

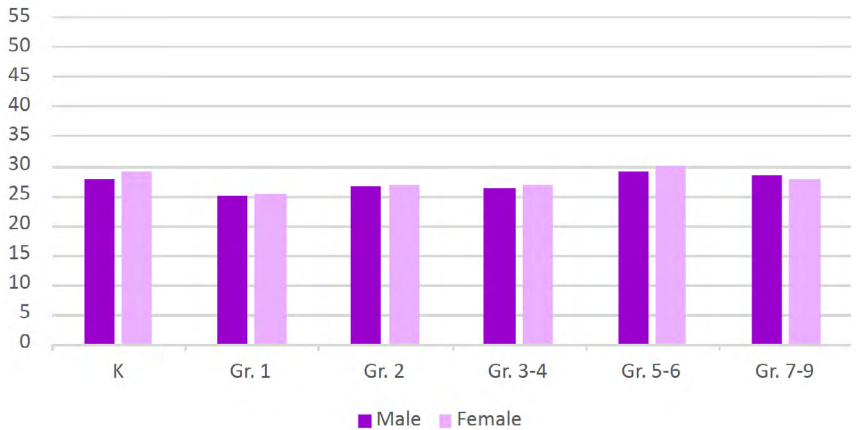
The average scores were very similar and there were no significant differences between Hispanic, Black, and White students on the **Naglieri–NV** test.

AVERAGE SCORE BY RACE/ETHNIC GROUPS



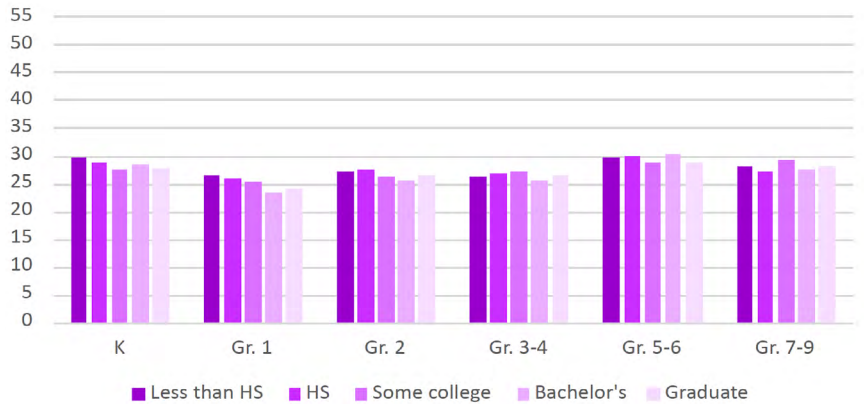
The average scores were remarkably similar across grades between male and female students on the **Naglieri–NV** test.

AVERAGE SCORE BY GENDER



The average scores were remarkably similar and there were no significant differences found between any of the parental education levels on the **Naglieri–NV** test.

AVERAGE SCORE BY PARENTAL EDUCATION LEVELS



Parental Education Levels defined as:

Less than high school diploma (Less than HS), high school graduate (HS), some college or associate's degree (Some college), Bachelor's degree (Bachelor's), and graduate or professional degree (Graduate).

*Tests included 55 items per form distributed across different grade-forms.

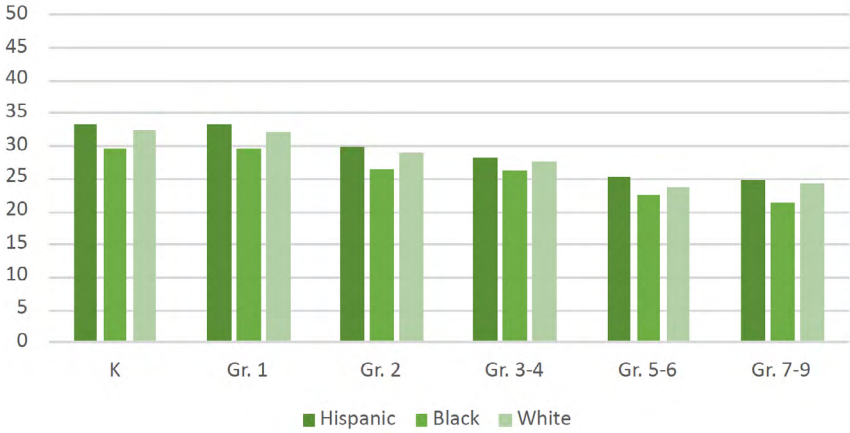
The Results

STUDY 3: Naglieri–Quantitative

Number of Students: **2,036***

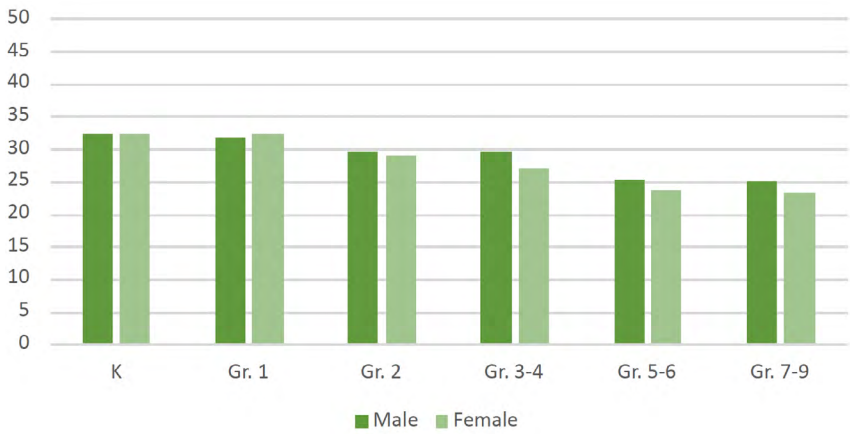
The average scores were very similar and there were no significant differences between Hispanic, Black, and White students on the **Naglieri–Q** test.

AVERAGE SCORE BY RACE/ETHNIC GROUPS



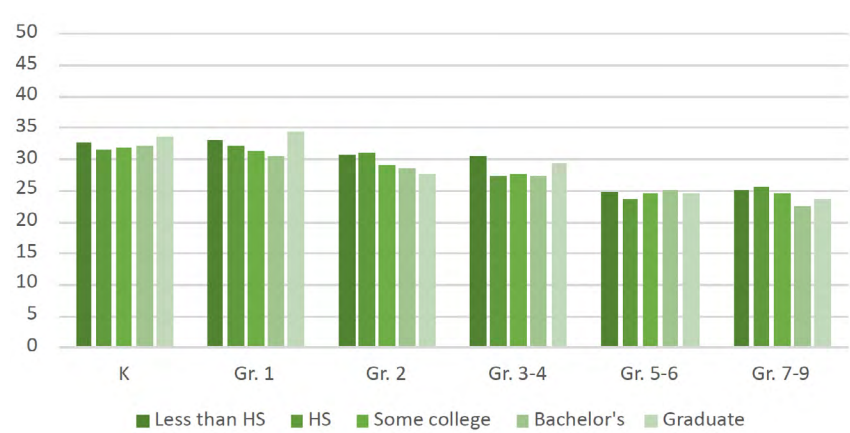
The average scores were remarkably similar across grades between male and female students on the **Naglieri–Q** test.

AVERAGE SCORE BY GENDER



The average scores were remarkably similar and there were no significant differences found between any of the parental education levels on the **Naglieri–Q** test.

AVERAGE SCORE BY PARENTAL EDUCATION LEVELS



Parental Education Levels defined as: Less than high school diploma (Less than HS), high school graduate (HS), some college or associate's degree (Some college), Bachelor's degree (Bachelor's), and graduate or professional degree (Graduate).

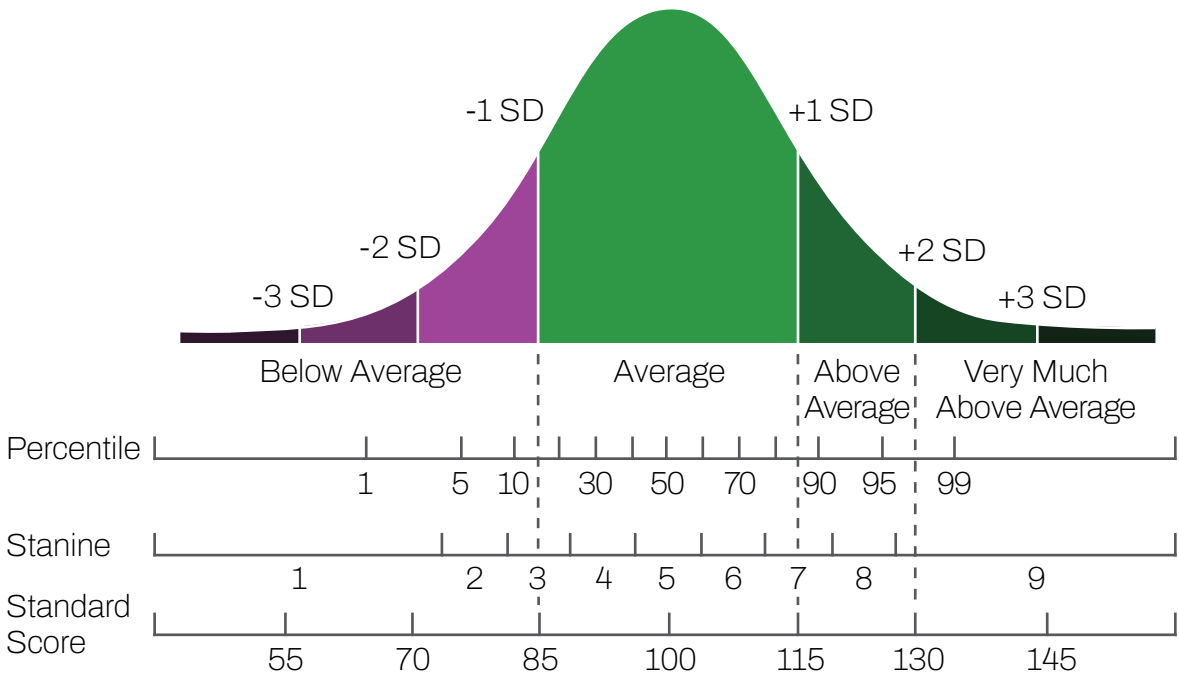
*Tests included 50 items per form distributed across different grade-forms.

Comparing Students to the Right Group

	National Norms	Local Norms
Scoring Options	Age-Based: 5 yrs, 2mos–14 yrs, 9 mos Grade-Based: Kindergarten–Grade 6	Age-Based: 5 yrs, 2mos–14 yrs, 9 mos Grade-Based: Kindergarten–Grade 9
Sample	Computed using a large sample of students who match the demographic makeup of the country by grade, gender, geographic region, and race/ethnicity.	Computed using a sample of students tested in a grade within a school, subdistrict (group of schools), or district.
Testing	Flexible: universal assessment or individual testing (e.g., nomination, referral)	Ideally, students should be universally tested within a grade.
Outcomes	Scores are a comparison of any student’s test performance to the test performance of age- or grade-based peers in the national norm sample.	Scores directly compare any student’s test performance to the test performance of all age- or grade-based peers in the local norm sample.

Understanding Test Scores

The Naglieri General Ability Tests compare each student to their peers. The figure below shows how most students in the sample score. Scores that are within the “Average” category (middle of the graph) occur most often. Scores above or below this range occur less often. Above Average scores indicate high general ability. The score profile is found in the graph below. Note that if only one test was administered, a Total Score cannot be calculated.



Our Research Studies

The main goal of the three research studies detailed here was to address the question: “Will students from different demographic groups (i.e., race/ethnicity, gender, or parental education level) score differently on these tests?” To answer this question, three studies were conducted in which a total 6,518 students across the U.S. completed one of the **Naglieri General Ability Tests** on a computer. Each student's score was calculated by taking the sum of the questions answered correctly on the research version of each test.

Comparisons across the student groups were conducted using a statistical method that controls for other demographics that may change or affect the scores. For example, to look at whether students from different racial and ethnic groups scored differently, other factors need to be controlled for that may affect their performance, such as the student's region, household income, parental education level, and gender.

For additional peer-reviewed research on differences by gender, education level, race/ethnicity, and urbanicity, see [Paolozza et al. \(2024\)](#) and [Naglieri et al. \(2026\)](#).

Conclusion

The research studies revealed little to no differences in student scores across race, ethnicity, gender, and parental education level on all three tests: **Naglieri-Verbal**, **Naglieri-Nonverbal**, and **Naglieri-Quantitative**. That is, students from different racial and ethnic backgrounds, both males and females, and students with different parental education levels, performed similarly to each other.

The results demonstrate that when direct attempts are made to minimize the confounding impact of prior knowledge and language, particularly in the instructions, test content, and response format of ability tests, a method of fairly assessing students for gifted programs can be achieved.



Identification at Title 1 schools is challenging. We know the learners are there, but our usual testing tools struggle to identify these students. It is heartbreaking for a teacher to know in their heart that a learner is gifted but not be able to find a way to identify them. [The Naglieri General Ability Tests have] given us the opportunity to ‘see’ the abilities more clearly.

Andy (not his real name) was unmotivated and did the bare minimum. He found little excitement in the classroom activities and was seen as a difficult child by many. Gifted identification was key for this child as it empowered him. He moved into content replacement reading and math classes, working above grade, and never missed a beat. ‘Finally, something interesting, something new, something I don’t know how to do!’ doesn’t every child deserve that?”

-Gifted and Talented District Coordinator, Arizona



Have questions?



Get in touch
with our team