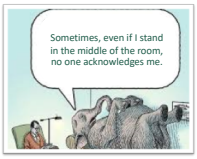
The Elephant in the Room: Identifying Underrepresented Populations

Jack A. Naglieri – Research Professor, Univ. of Virginia

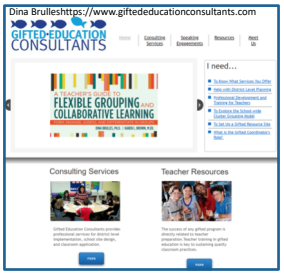
Contributors to this ppt:

Dina Brulles – Director of Gifted Education, Paradise Valley USD

Kimberly Lansdowne – Executive Director, Arizona State University



Mystery Number is 848,400



FOR MORE INFORMATION PLEASE GO TO OUR WEB PAGES

Conclusions in the Era of BLM

- Gifted identification based on verbal, nonverbal and quantitative tests requires too much knowledge of
  - the language used in the directions (V, NV, Q)
  - the content of questions (V & Q)
  - Verbal responses (individually administered)
- Students who come from low income families, are culturally different, or limited English skills are not assessed accurately
- Many Hispanic and Black students are denied entry to gifted education and therefore they don't reach their potential
- BUT…WE CAN and **MUST** DO BETTER especially **NOW**!

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Ideas to Consider

- Introduction
- Measurement of General Ability
- Three New Tests
- How to Identify Gifted Students

How and Why…

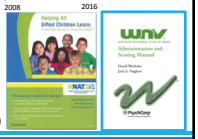
- My work in equitable assessment began in 1982
  - Lecture on Navajo Indians
  - Havasupai Indian Reservation
- First Research
  - Naglieri, J. A. (1982). Does the WISC-R measure verbal intelligence for non-English speaking children? *Psychology in the Schools, 19*, 478-479.
- First Test
  - Matrix Analogies Tests Individual and Group administrations (1985)
- First Book
  - Helping All Gifted Students Learn (Naglieri, Brulles & Lansdowne, 2009)

1985 MAT Short and Expanded Forms

Naglieri Nonverbal Ability Test in 1997

NNAT -2 published in 2008

NNAT -3 published in 2016



Tests Created with Equity as a Goal

1. Naglieri, J. A. (1985). Matrix *Analogies Test - Expanded Form.* San Antonio: The Psychological Corporation.
2. Naglieri, J. A. (1985). Matrix *Analogies Test - Short Form.* San Antonio: The Psychological Corporation.
3. Naglieri, J. A. (1997). Naglieri *Nonverbal Ability Test.* San Antonio, TX: The Psychological Corporation.
4. Naglieri, J. A., & Bardos, A. N. (1997). General *Ability Scale for Adults (GAMA* San Antonio, TX: Pearson.
5. Naglieri, J. A., & Das, J. P. (1997). Cognitive *Assessment System. Austin: ProEd.*
6. Naglieri, J. A. (2003). Naglieri *Nonverbal Ability Test - Individual Form.* San Antonio, TX: Pearson.
7. Wechsler, D., & Naglieri, J. A. (2006). *Wechsler Nonverbal Scale of Ability*. San Antonio, TX: Pearson.
8. Naglieri, J. A. (2008). *Naglieri Nonverbal Ability Test – 2nd Edition.* San Antonio, TX: Pearson.
9. Naglieri, J. A., Das, J. P., & Goldstein, S. (2014). *Cognitive Assessment System Second Edition*. Austin, TX: ProEd.
10. Naglieri, J. A. (2016). *Naglieri Nonverbal Ability Test – Third Edition*. San Antonio, TX: Pearson.
11. Naglieri, J. A., Moreno, M. A., & Otero, T. M. (2017). *Cognitive Assessment System – Espanol*. Austin, TX: ProEd.
12. Naglieri, J. A. (2021). *Naglieri Ability Test: Nonverbal*. Markham, Canada: Multi-Health Systems.
13. Naglieri, J. A. & Brulles, D. (2021). *Naglieri Ability Test: Verbal*. Markham, Canada: Multi-Health Systems.
14. Naglieri, J. A. & Lansdowne, K. (2021). *Naglieri Ability Test: Quantitative*. Markham, Canada: Multi-Health Systems.

Obstacle to Equitable Identification

- Clarification of terms…
  - Gifted = very smart
  - Talented = very accomplished
- Identification procedures
  - Gifted/Talented students are often identified with traditional IQ tests comprised of
    - verbal and quantitative tests that demand knowledge of English
    - Verbal directions that include many verbal concepts
- Using a test of ability that demands knowledge of English and understanding verbal directions is not reasonable

Does a verbal test that demands English really make sense?

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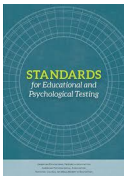
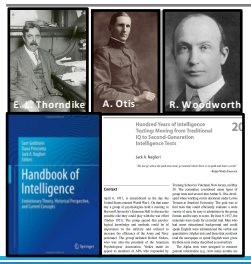
Opportunity to learn and Test Bias

- *According to the Standards for Educational and Psychological Testing* (AERA, APA & NCME, 2014), if a person has had limited opportunities to learn the content in a test of intelligence, that test may be considered **unfair because** it penalizes students for not having learned the content
- **Equitable assessment** can be achieved if all examinees have equal opportunity to perform
- The Standards also remind us that **even if the norming data do not demonstrate psychometric bias tests can still be considered unfair.**



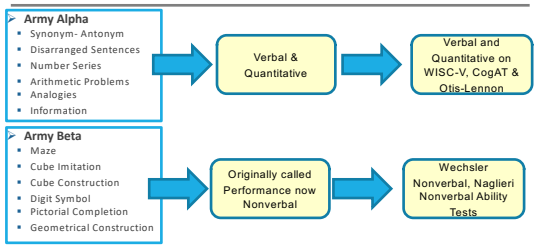
Army Mental Testing (Yoakum & Yerkes)

http://www.jacknaglieri.com/cas2.html



- A group of psychologists met at Harvard in April of 1917 to construct an ability test to help the US military evaluate recruits (WWI) for responsible positions
- Their goal was to develop a workable set of tests called the Army Alpha & Beta

From Alpha & Beta to Wechsler IQ



Take this IQ Test

1. Bull Durham is the name of	1. **tobacco**
2. The Mackintosh Red is a kind of	2. **fruit**
3. The Oliver is a	3. **typewriter**
4. A passenger locomotive type is the	4. **Mogul**
5. Stone & Webster are well know	5. **engineers**
6. The Brooklyn Nationals are called	6. **Superbas**
7. Pongee is a	7. **fabric**
8. Country Gentleman is a kind of	8. **corn**
9. The President during the Spanish War was	9. **Mckinley**
10. Fatima is a make of	10. **cigarette**

From: Psychological Examining the United States Army (Yerkes, 1921, p. 213)

Gifted Identification

- This presentation is about children who may not have good grades, or the academic skills or command of English, yet they are very smart – **gifted**
- These children can become very **talented** given the opportunity to learn
- How many children like this are in our country?

848,400 non-White
247,500 ELL gifted in grades K-12 not served

WHY are so many of these students missed?

Number of Students Missed = 848,402

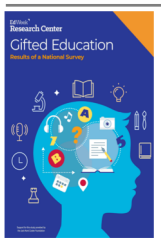
Table 1. Number of Students in US Public Schools Grades K-12 in 2018

	US Population	Potentially Gifted (8%) of US Population	Actual Numbers of Students in Gifted & Talented Programs	Numbers of students Not Identified
White	26,822,930	2,145,834	2,065,366	80,468
Black	8,530,756	682,460	366,823	315,637
Hispanic	15,888,681	1,271,094	778,545	492,549
Native American	572,330	45,786	25,183	20,603
Two or More Races	1,782,991	142,639	123,026	19,613
Total non-White	26,774,758	2,141,979	1,293,577	848,402

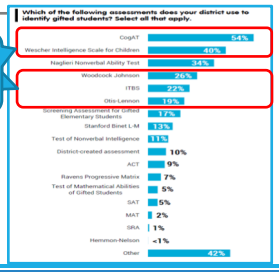
English language learner (ELL) students enrolled in public elementary and secondary schools in 2015 by Race and Ethnicity

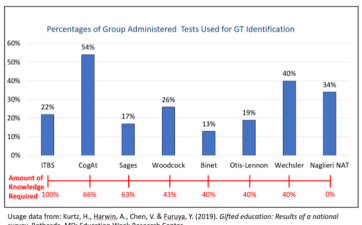
	N of ELL in Public Ed	N Potentially Gifted (8%)	N students Identified	N Missed (% Missed)
White	294,763	23,581	8,548	15,033 (64%)
Black	178,141	14,251	5,166	9,085 (64%)
Hispanic	3,772,633	301,811	109,406	192,404 (64%)
Asian	511,703	40,936	14,839	26,097 (64%)
Pacific Islander	26,992	2,159	783	1,377 (64%)
Native Am./ Alaska Native	38,792	3,103	1,125	1,978 (64%)
Two or More Races	31,136	2,491	903	1,588 (64%)
Total	4,854,160	388,333	140,771	247,562

National Survey of Gifted Education



These tests have verbal and quantitative questions





Usage data from: Kurtz, H., Harwin, A., Chen, V. & Furuya, Y. (2019). *Gifted education: Results of a national survey*. Bethesda, MD: Education Week Research Center.

We estimated the amount of knowledge included in the most widely used tests used to identify gifted students according to the results of a 2019 survey (Kurtz, Harwin, Chen & Furuya). The number of scales in each test that required knowledge was determined and expressed as a percentage of the total number of scales.

Thinking and Knowing Continuum

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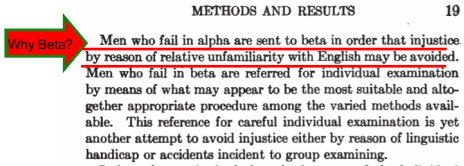
1920 Army Testing (Yoakum & Yerkes)

Note there is no mention of measuring verbal and nonverbal intelligences – **they saw a social justice issue…and today in the era a BLM the need is even more urgent**

Why Beta?



METHODS AND RESULTS 19

Men who fail in alpha are sent to beta in order that injustice by reason of relative unfamiliarity with English may be avoided. Men who fail in beta are referred for individual examination by means of what may appear to be the most suitable and altogether appropriate procedure among the varied methods available. This reference for careful individual examination is yet another attempt to avoid injustice either by reason of linguistic handicap or accidents incident to group examining.

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NNAT's Small Race & Ethnic Differences

	N	Mean	Diff
White	2,306	99.3	
Black	2,306	95.1	4.2
White	1,176	101.4	
Hispanic	1,176	98.6	2.8
White	466	103.6	
Asian	446	103.0	0.3

Comparison of White, African American, Hispanic, and Asian Children on the Naglieri Nonverbal Ability Test

Jack A. Naglieri and Margaret E. Ronning
Ohio State University

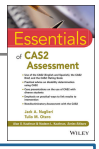


Table 1.6 Standard Score Mean Differences by Race on Traditional and Nontraditional Intelligence Tests

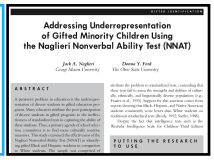
Test	Difference
Traditional IQ Tests	
SB-IV (matched samples)	12.6
WISC-IV (normative sample)	11.5
WJ-III (normative sample)	10.9
WISC-IV (matched samples)	10.0
Nontraditional Tests	
K-ABC (normative sample)	7.0
K-ABC (matched samples)	6.1
KABC-II (matched samples)	5.0
CAS2 (normative sample)	6.3
CAS (demographic controls of normative sample)	4.8
CAS2 (demographic controls of normative sample)	4.3

NNAT Identified Equal Percentages

Table 2
NNAT Scores

	White		Black		Hispanic		Expected
	n	%	*n*	%	*n*	%	%
120 & above	1,571	10.3	269	9.4	190	9.5	9.0
125 & above	906	5.6	145	5.1	88	4.4	5.0
130 & above	467	2.5	75	2.6	46	2.3	2.0
135 & above	190	1.1	42	1.5	18	0.9	1.0
140 & above	90	0.6	19	0.6	9	0.4	0.4
Total Sample *n*	14,141		2,863		1,991		

Note. Expected percentage values are those associated with normal curve probabilities.



Addressing Underrepresentation of Gifted Minority Children Using the Naglieri Nonverbal Ability Test (NNAT)

Jack A. Naglieri, George Mason University
Donna Y. Ford, The Ohio State University

ABSTRACT

PUTTING THE RESEARCH TO USE

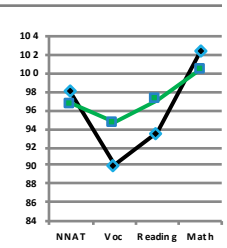
Very Similar percentages of Black, White and Hispanic students earned a standard score of 125 (95th percentile) or above

Hispanic Children

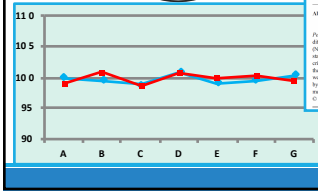
BRIEF REPORTS

Comparison of Hispanic Children With and Without Limited English Proficiency on the Naglieri Nonverbal Ability Test

Jack A. Naglieri, George Mason University
Ashley L. Booth, University of Virginia
Aileen Wrasler, George Mason University



No Gender Differences on NNAT



Available online at www.sciencedirect.com
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INTELLIGENCE
Intelligence 34 (2006) 253–260

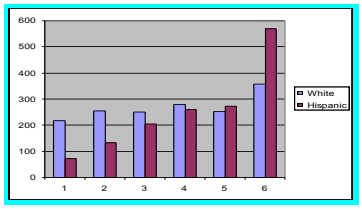
Developmental gender differences on the Naglieri Nonverbal Ability Test in a nationally normed sample of 5–17 year olds

Johannes Rojahn *, Jack A. Naglieri
George Mason University, United States

Received 22 June 2005; received in revised form 18 September 2005; accepted 26 September 2005
Available online 14 November 2005

Abstract

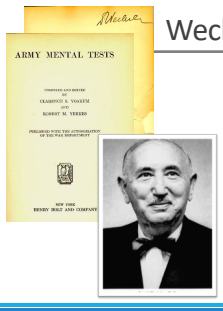
Dr. Dina Brulles Glendale, AZ
Gifted using NNAT in Years 2000-2006



Numbers of gifted population depicted by ethnic representation of White and Hispanic gifted student populations between 2000-2006

Ideas to Consider

- Introduction
- Measurement of General Ability
- Three New Tests
- How to Identify Gifted Students



Wechsler (1939)

- Built his IQ test on the Army Alpha and Beta
- His definition of intelligence was "The aggregate or global capacity of the individual to act purposefully, to think rationally, and to deal effectively with his environment (1939)"
- but his test yielded a Verbal IQ and Performance IQ suggesting two types of intelligence

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Wechsler & Spearman's *g*

of nonverbal assessment many paces forward. In addition, the emphasis in the *WNV Manual* that the Full Scale measures *general ability nonverbally*—and *not* nonverbal ability—is an important distinction that further ties the WNV to Dr. Wechsler. Although his intelligence tests in the 1930s and 1940s departed from the one-score *Stanford-Binet* by offering separate Verbal and Performance IQs as well as a profile of scaled scores, Dr. Wechsler remained a firm believer in Spearman's *g* theory throughout his lifetime. He believed that his Verbal and Performance Scales represented different ways to access *g*, but he never believed in nonverbal intelligence as being separate from *g*. Rather, he saw the Performance Scale as the most sensible way to measure the general intelligence of people with hearing impairments, language disorders, or limited proficiency in English. And that is precisely what the WNV is intended to do.

Alan S. Kaufman, PhD
Clinical Professor of Psychology
Yale Child Study Center
Yale University School of Medicine

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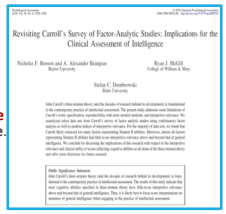
Support for 'g'

- The small portions of variance uniquely captured by [subtests]… render the group factors [scales]of questionable and support the value of general ability
- Present CFA results confirm the EFA results (Canivez, Watkins, & Dombrowski, 2015); Dombrowski, Canivez, Watkins, & Beaujean (2015); and Canivez, Dombrowski, & Watkins (2015).

Support for 'g': Research on CHC

- John Carroll's three-stratum theory … is foundational to the contemporary practice of intellectual assessment.
- **The results of this study indicate that most cognitive abilities specified in three-stratum theory have little-to-no interpretive relevance above and beyond that of general intelligence.**
- Thus, it is likely **best to focus score interpretations on measures of *general intelligence* when engaging in the practice of intellectual assessment**.



Research Supports General Ability

Benson, N. F., Beaujean, A. A., McGill, R. J, & Dombrowski, S. C. (2018). Revisiting **Carroll's Survey of Factor-Analytic Studies**: Implications for the Clinical Assessment of Intelligence. *Psychological Assessment*, 30, 8, 1028–1038.

Canivez, G. L., Watkins, M. W., & Dombrowski, S. C. (2017). Structural validity of the **Wechsler Intelligence Scale for Children–Fifth Edition:** Confirmatory factor analyses with the 16 primary and secondary subtests. *Psychological Assessment, 29*, 458-472.

Canivez, G. L., & McGill, R. J. (2016). Factor structure of the **Differential Ability Scales–Second Edition**: Exploratory and hierarchical factor analyses with the core subtests. *Psychological Assessment, 28*, 1475-1488. http://dx.doi.org/10.1037/pas0000279

Canivez, G. L., & McGill, R. J. (2016). Factor structure of the **Differential Ability Scales-Second Edition**: Exploratory and hierarchical factor analyses with the core subtests. Psychological Assessment, 28, 1475–1488. https://doi.org/10.1037/pas0000279

Canivez, G. L. (2008). Orthogonal higher order factor structure of the **Stanford-Binet Intelligence Scales-Fifth Edition** for children and adolescents. School Psychology Quarterly, 23, 533–541.

Dombrowski, S. C., **Canivez, G. L.**, & Watkins, M. W. (2017, May). Factor structure of the 10 **WISC–V** primary subtests across four standardization age groups. *Contemporary School Psychology*. Advance online publication.

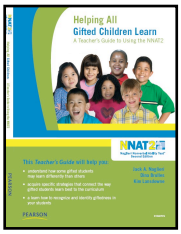
Dombrowski, S. C., McGill, R. J., & Canivez, G. L. (2017). Exploratory and hierarchical factor analysis of the **WJ IV Cognitive** at school age. *Psychological Assessment, 29*, 394-407.

McGill, R. J., & **Canivez, G. L** (2017, October). Confirmatory factor analyses of the **WISC–IV Spanish** core and supplemental Subtests: Validation evidence of the Wechsler and CHC models. *International Journal of School and Educational Psychology*. Advance online publication.

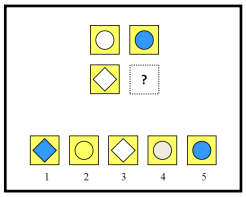
Watkins, M. W., Dombrowski, S. C., & **Canivez, G. L.** (2017, October). Reliability and factorial validity of the **Canadian Wechsler Intelligence Scale for Children–Fifth Edition**. *International Journal of School and Educational Psychology*.

General ability (Naglieri, Brulles & Lansdowne, 2009)

- General ability is what allows us to solve many different kinds of problems
- The problems may involve
  - reasoning, memory, sequencing, verbal and math skills, patterning, connecting ideas across content areas, insights, making connections, drawing inferences, analyzing simple and complex ideas.



These questions require General Ability!



Which word is different:
girl dog chair fish ?

3 is to 6 as 5 is to _____?

C^7 is to F as E^7 is to____?

Despite the differences in content, each of these questions requires understanding the relationships among parts.

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General Ability

- Even though the tasks were different in content (shapes, words, numbers) they all rely on general ability as described by Wechsler and many others
- The reason is that they all require understanding relationships among things or ideas

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Questions or thoughts ?

Ideas to Consider

- Introduction
- Measurement of General Ability
- Three New Tests
- How to Identify Gifted Students

Introducing The Naglieri General Ability Tests (Naglieri, Brulles & Lansdowne, 2021)

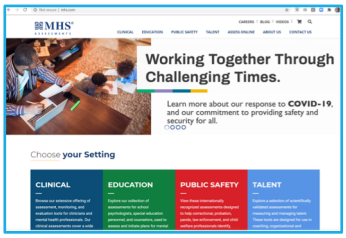
Naglieri Verbal (Naglieri & Brulles, 2021)
Naglieri Nonverbal (Naglieri, 2021)
Naglieri Quantitative (Naglieri & Lansdowne, 2021)

Naglieri Verbal Nonverbal Quantitative
General Ability Tests

Publisher

Naglieri Verbal Nonverbal Quantitative
General Ability Tests

- The Naglieri General Ability Tests: Verbal, Nonverbal & Quantitative are published by Multi-Health Systems (MHS)
  - mhs.com
- They also publish my:
  - Autism Spectrum Rating Scale (ASRS)
  - Comprehensive Executive Function Inventory (CEFI)
  - Cognitive Assessment System 2nd Edition (CAS2)



Measuring Ability Equitably

Dina Brulles, Kim Lansdowne and I have constructed three new tests that will be used for identification of gifted students

The focus of these tests is EQUITABLE ASSESSMENT of all students

The tests measure general ability using three types of content: Verbal, Nonverbal and Quantitative

- Naglieri **Nonverbal** (Naglieri, 2021)
- Naglieri **Verbal** (Naglieri & Brulles, 2021)
- Naglieri **Quantitative** (Naglieri & Lansdowne, 2021)

Naglieri General Ability Tests

(Naglieri, Brulles & Lansdowne, 2021)

Naglieri Verbal Nonverbal Quantitative
General Ability Tests

- The *General Ability Tests* are group or individually administered using online or paper formats ages 4 to 18.
- Test items are presented using diagrams and pictures.
- The questions demand reasoning while requiring little to no academic content and can be solved regardless of the language(s) spoken by the student.
- We use animated directions when taken online or comic strip display of directions for paper-and-pencil format.
- To identify gifted students from diverse cultural, linguistic, or socioeconomic backgrounds, or those who have had limited educational experiences.

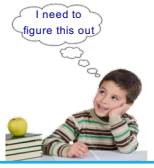
Goals in Making the General Ability Test Battery

- Taking English out of the testing *environment*
- Present test *instructions* using either pictorial or animated formats
- Create a Verbal test *questions* that can be solved using any language
  - The test is based on a neuropsychological concept from A. R. Luria which demand identification of verbal concepts
- Create a new version of nonverbal matrices
  - New ways of constructing progressive matrices have been developed which demand understanding the relationships among graphical stimuli
- Create a Quantitative test *questions* that do not require language
  - Several types of items are used to evaluate how well a student understands quantitative relationships

Our Tests Measure *Thinking* not *Knowing*

- What does the student have to know to complete a task?
  - This is dependent upon educational opportunity

- How does the student have to think to complete a task?
  - This is dependent on the brain



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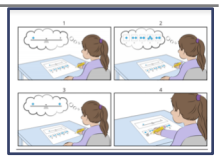
Test Directions

- *California Achievement Test & Iowa Test of Basic Skills* instructions include many basic concepts that students may not have mastered at the ages for which the tests were intended (Cummings & Nelson, 1980)
- Students' ability to recall directions presented orally was related to their working memory capacity. (Randall, Engle, Carullo, & Collins, 2015)
- CogAT *nonverbal* scale demands comprehension of *verbal* directions
  - The instructions for 5 and 6-year-olds contain approximately 400 words and many verbal concepts and complex verbal statements like: **The small circle goes with the large circle in the same way that the small square goes with the large square.**
- The inclusion of verbal concepts and strain on working memory are an obstacle for any student with limited verbal skills

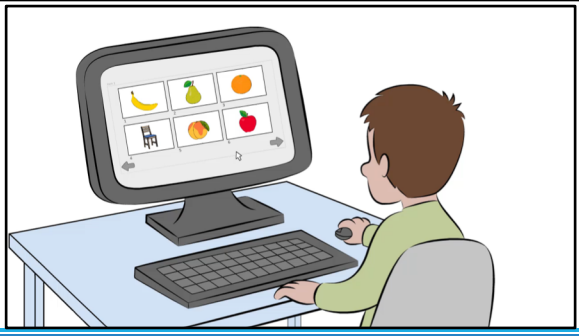
Pictorial Instructions for All Students

- The **paper forms** for the Naglieri General Ability Test Battery have *pictorial directions* that greatly reduce the need for verbal instructions
- The instructions for the **online version are presented in a video**
- Additional explanation is permitted as needed in both versions of the tests
  - Naglieri Nonverbal (Naglieri, 2021)
  - Naglieri Verbal (Naglieri & Brulles, 2021)
  - Naglieri Quantitative: (Naglieri & Lansdowne, 2021)



Description of the Verbal Measure of General Ability

Naglieri & Brulles (in preparation)

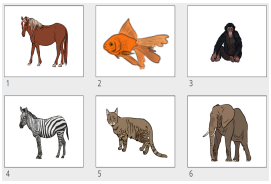


Naglieri Ability Test - Verbal

This test was modeled after an approach described by A. R. Luria (1966) to evaluate verbal conceptual thinking.

Luria (1982) stated that language involves, "a complex system of codes (p. 29)" where, "every word *designates a thing, an attribute, an action or a relationship* (p 34)."

The task, referred to as superfluous fourth, demands that a subject reason and identify which word does not belong with the others, for example, "rose, daisy, stem, tulip,".



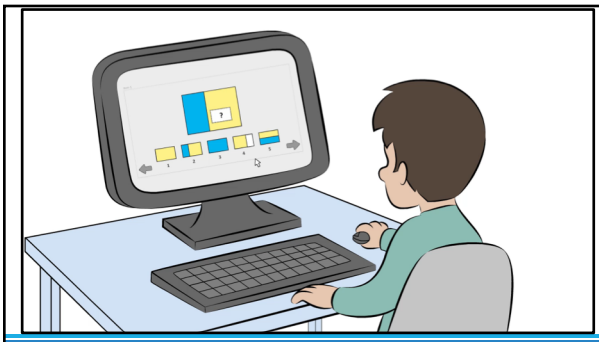
Authors: Jack Naglieri & Dina Brulles

Verbal Pilot Study Results (2019)

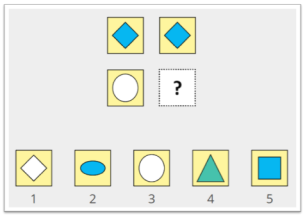
- **SAMPLE**
  - 2,482 That closely matches the US population on key demographics
- **GENDER**
  - No difference between **males** and **females** for raw score across all forms
- **RACE/ETHNICITY**
  - No differences among **White, Black, & Hispanic** for raw score across all forms
- **PARENTAL EDUCATION LEVEL**
  - No differences among five education levels (**No high school diploma; High School graduate; Some college/Associate's degree; Bachelor's degree; Graduate/professional degree**) for raw score across all forms

Description Of The Nonverbal Measure Of General Ability

Naglieri (2021)



Naglieri Ability Test - Non-verbal



- Online and paper versions
- Group or individual administration
- Several NEW types of items have been developed
- Animated instructional video
- Interactive practice questions
- Minimal verbal directions
- Pre-K, Kindergarten, Grade 1, Grade 2, Grade 3/4, Grade 5/6, Grade 7-9, Grade 10-12

Nonverbal Pilot Study Results (2019)

- **SAMPLE**
  - 3,630 That closely matches the US population on key demographics
- **GENDER**
  - No difference between **males** and **females** for raw score across all forms
- **RACE/ETHNICITY**
  - No differences among **White, Black, & Hispanic** for raw score across all forms
- **PARENTAL EDUCATION LEVEL**
  - No differences among five education levels (**No high school diploma; High School graduate; Some college/Associate's degree; Bachelor's degree; Graduate/professional degree**) for raw score across all forms

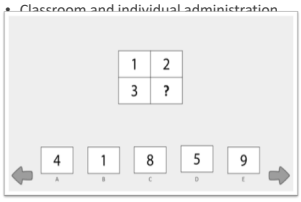
Description of the Quantitative Measure of General Ability

Naglieri Ability Test - Quantitative

- These items demand analysis of sequences of numbers or relationships among a group of numbers. For example, 1 is to 2 (a difference of 1) as 3 is to … 4. Alternatively, the items can be solved by simply recognizing that the when analyzed vertically, 1 becomes 3, so 2 should become 4.
- These items test a person's ability to understand relationships and patterns involving numbers, just as understanding relationships among shapes in the NAT-Nonverbal or verbal categories in the NAT-Verbal.

Authors: Jack Naglieri & Kim Lansdowne

- Online and paper version
- Classroom and individual administration



Quantitative Pilot Study Results (2019)

- **SAMPLE**
  - 2,841 That closely matches the US population on key demographics
- **GENDER**
  - No difference between **males** and **females** for raw score across all forms
- **RACE/ETHNICITY**
  - No differences among **White, Black, & Hispanic** for raw score across all forms
- **PARENTAL EDUCATION LEVEL**
  - No differences among five education levels (**No high school diploma; High School graduate; Some college/Associate's degree; Bachelor's degree; Graduate/professional degree**) for raw score across all forms

Naglieri General Ability Tests Release

- The three tests will be released in 2021 for application using local norms
- Data collection for generation of national reference group will resume as soon as it is possible
- We know we have highly reliable measures that work well across ages

Reliability Coefficients of Naglieri General Ability Tests (July 2020)

Quantitative	Kindergarten	.89
	Grade 1	.90
	Grade 2	.92
	Grades 3 and 4	.94
	Grades 5 and 6	.94
	Grades 7 - 9	.95
	Grade 10 - 12	.93
	Median	**.93**
Nonverbal	PreK	.92
	Kindergarten	.87
	Grade 1	.90
	Grade 2	.86
	Grades 3 and 4	.92
	Grades 5 and 6	.93
	Grades 7 - 9	.95
	Grade 10 - 12	.94
	Median	**.92**
Verbal	K - grade 2	.92
	Grades 3 - 6	.90
	Grades 7 - 12	.89
	Median	**.90**

Questions or thoughts ?

Ideas to Consider

- Introduction
- Measurement of General Ability
- Three New Tests
- How to Identify Gifted Students

Verbal Tests Discriminate

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

DANIEL, DINAH and DEANNA MCFADDEN, minors, by their parent and next friend, Tracy McFadden; KAREN, RODOLFO and [illegible] TAPIA, minors, by their parent and next friend, Marisela Montoya; JOCELYN BURD[illegible] by her parent and next friend, Grisel[illegible] and KASIMIER IVY, minors, by their parent and next friend, Beverly Ivy; KRISTI[illegible] SIFUENTES, minors, by her parent and friend, Irma Sifuentes,

Plaintiffs,

v.

BOARD OF EDUCATION FOR ILLINOIS SCHOOL DISTRICT U-46,

Defendant.

Judge Joseph W. Coleman

On July 11, 2013, Judge Robert Gettlemen issued a decision holding that District U-46 *intentionally* discriminated against Hispanic students specific in their gifted programming (placement), and found problems with policies and instruments for

students – Hispanic and Black students for SWAS. Judge Gettlemen found discrimination regarding (a) tests for screening and for identification, (b) designated cutoff scores for screening and identification, (c) use of both verbal and math scores at arbitrary designated levels for screening and for identification, (d) use of weighted matrix, as well as content and criteria in weighted matrices that favored achievement and traditional measures, (e) too little reliance on a nonverbal test (Naglieri Nonverbal Ability Test) for admission to SWAS, (f) re-testing Hispanic students for middle school gifted program, (g) timing of testing, (h) use of parental referrals, and (i) use of teacher referrals (see Table 2).

CogAt Verbal, Quantitative require English

Weighted matrix favored achievement and CogAT

Too little reliance on NNAT

The district with 42 [illegible] only 2% were identified as gifted. Did the District discriminate against Hispanic Students?

How to Equitably Identify Gifted

- Do **universal screening** with ability tests that do not require knowledge of English
- Use the Verbal, Nonverbal and Quantitative test scores to help ensure that every student had the opportunity to demonstrate their ability.
- These tests will help increase participation of under-served populations if they are used properly…

Local Norming Procedure for V, NV, & Q

- Obtain scores for **ALL** students (not only referred students) in the grades for which the GT decisions is needed
- Decide how the information obtained for each student is to be evaluated (i.e., average, and or logic) and if it is to be weighted
- Rank order the students' raw scores on the V, NV & Q tests
  - Raw scores can be converted to percentile or standard scores as desired
- Determine a cut-score based on the number of students the GT program can accommodate
- Evaluate the outcome

Participate in Standardization of New Tests

- MHS is looking for standardization sites to finalize the development of these three tests.
- Raw score data (like normed standard scores) could be used as part of the process to identify students for gifted and talented educational programs
- Contact: **Sydney Scanlan, Data Collection Coordinator at MHS: sydney.scanlan@mhs.com**

800-456-3003 ext. 447

Help Shape the Future of Fair and Equitable

Gifted Identification

Multi-Health Systems (MHS) is developing an exciting new gifted battery to assess student giftedness across multiple domains. We are looking for participants to help shape this new assessment and its impact on the identification of giftedness.

Why Participate?

In addition to receiving an honorarium for your participation, you will gain access to a ground-breaking gifted battery prior to publication. You will have the opportunity to provide valuable feedback which will help us understand how the final product will better meet the needs of students and teachers alike.

Who Can Participate and How?

MHS is looking to administer the Gifted Battery to students from Pre-Kindergarten to Grade 12, school wide or class wide for data collection purposes. Students will be completing the gifted battery using a computer or tablet.

When?

The study is scheduled for early fall 2019.

How Do I Sign Up?

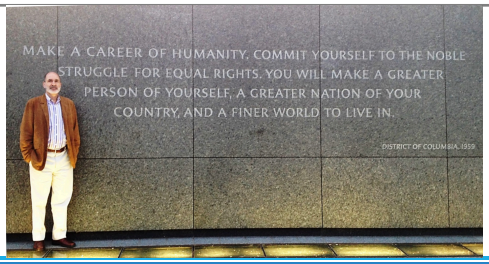
To request more information or to sign up for this study, please contact **Sydney Scanlan, Data Collection Coordinator at MHS,** at: sydney.scanlan@mhs.com or +1 416 492 2627 ext. 447

Who is MHS?

MHS is a leading developer of scientifically validated tools and solutions for [illegible]

MHS

Helping you help others

Questions or thoughts ?

Gifted Identification is a Social Justice Issue