




Test Bias

■ By:

- ⑩ Velda Schneider
- ⑩ Ndona J Kanza Hansen
- ⑩ Suzy Ries



Please take out a piece of paper, number it 1-10 and answer the following questions.

Your ability to answer the questions correctly will determine your annual salary next school year.



Question #1

Your homeboy just told you he purchased a grill for abunches of guap. How would you respond?

- a. Ask if it was a mamom.
- b. Ask how expansive it was.
- c. Ask him to sperlunk.
- d. Take a ride in his rut.



Question #2

Your professor tells you to agitate the gravel or cut the gas.
What should you do?

- a. Tell him you're earthbound.
- b. Share your bread with him.
- c. Ask him if he's jacketed.
- d. Shut your trap. You're not an actor.

Question #3

We went to the north 40 to see if it was tall enough to use the Hydra-Swing next week. Based on this sentence, what is a Hydra-Swing?

- a) a Hydra-Swing is a swinging mechanism used to lift up injured heifers or cows that become partially paralyzed due to difficult births or other complications.
- b) a Hydra-Swing is a hay cutting machine that you pull behind the tractor to cut and condition hay for bailing.
- c) a Hydra-Swing is used to spray chemicals in a tall alfalfa field to prepare it for cutting.
- d) a Hydra-Swing is a water mechanism used to grow taller crops or water crops during a dry growth season.

Question #4

We're going to go down to see the patient in room 113 to do a quick suck and a look. What does this sentence mean?

- a) We will perform a procedure to suck the fluid out of an injured knee and do a scope treatment on it.
- b) We will perform an extraction of fluid from a patient's bladder and test it for infection.
- c) We will perform a bronchoscopy and take the secretions out of a patient's lungs and look to see if everything is okay.
- d) We will suck scar tissue out of a previous injury and look to make sure it is not infected and the scar tissue has been cleared away.



Question #5

What number comes next in the sequence?

one, two, three, _____?

Question #6

What number comes next in the following sequence?

12 5 6 9 10 _____



Question #7

A bubbler is:

- a bubble machine
- a water fountain
- a person that talks a lot
- a person that makes bubbles



Question #8

Where are you most likely to find Sundrop?

- In Wisconsin
- In Florida
- In a movie theater
- None of the above



Question #9

The term AVHRR stands for:

- Artero-ventricular hyper reticular retention
- Advanced very high resolution radiometer
- All vehicle hazard road runner
- Nothing; Velda made it up

Question #10

In the Sisterhood of the Traveling Pants, the story revolves around:

- Tibby
- Carmen
- Lena
- Bridget
- All of the above

Essential Questions

- Is there test bias against minorities in standardized testing?
- How do you identify test bias against minorities ?
- What are the effects of test bias against minorities ?
- How do you change bias against minorities in standardized testing?






Three Undesirable Characteristics in Testing:

1. **Stereotyping** is consistent representation of a given group in a particular light – which may be offensive to members of that group.

Stereotyping does not lead to differential performance, except in extreme cases.

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2. **Bias** is defined as the presence of some characteristic of an item that results in differential performance for two individuals of the same ability but from different ethnic, sex, cultural or religious groups.

 3. **Offensiveness** can obstruct the purpose of a test item, may produce negative feelings and affect attitudes toward testing – thus lowering test scores.

History of Testing Bias:

- In the early 1900's IQ testing results were used as a basis to sterilize those with marginal test results.
- Test results were also used in the 1920's to rank racial and ethnic groups and rig immigration quotas.
- From the results of verbally based testing, deaf children were thought incapable of mental processing and institutionalized through 1967.



- Women were discriminated against on scholarship competitions based on biased exam scores.



- IQ test results were used to label individuals: moron, idiot, imbecile.
- School districts use tests to track and place students in grades K-12 – which perpetuates segregation in the classroom.
- Teaching to the test has damaging effects on curriculum and instruction, particularly minorities and low income children.

- The use of standardized testing has produced a decrease in the number of African American educators.
- Researchers have used IQ tests to link genetic predisposition to criminality.



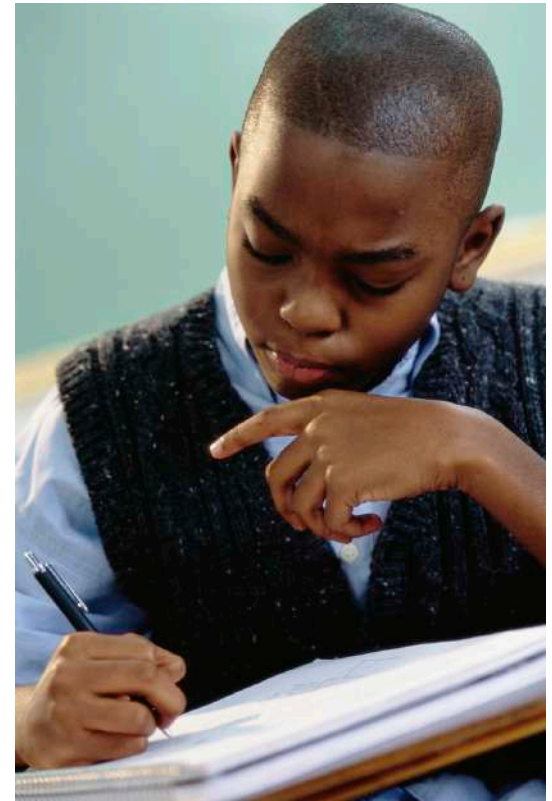


Test Bias Reform

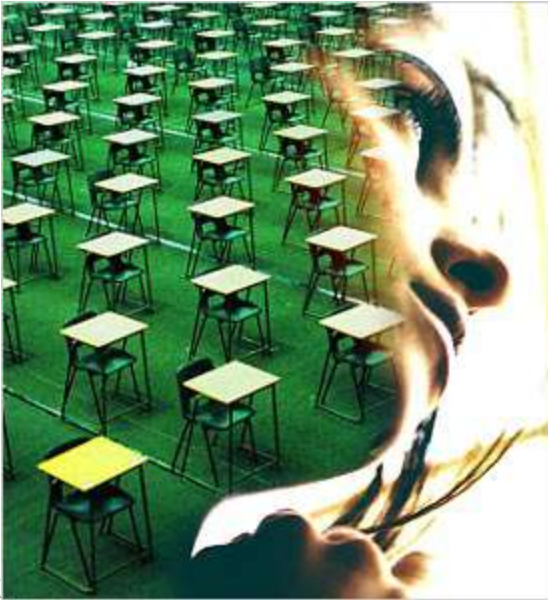
- Began in the 1970's and early 1980's when test publishers incorporated controls for bias after testing results showed massive gaps between racial groups, social strata and regions of the country.

Six groups focused on during bias review:

- Asian/Pacific Islanders
- Black Americans
- Hispanic Americans
- Individuals with Disabilities
- Native Americans
- Women



When you think of test bias, think of content validity.

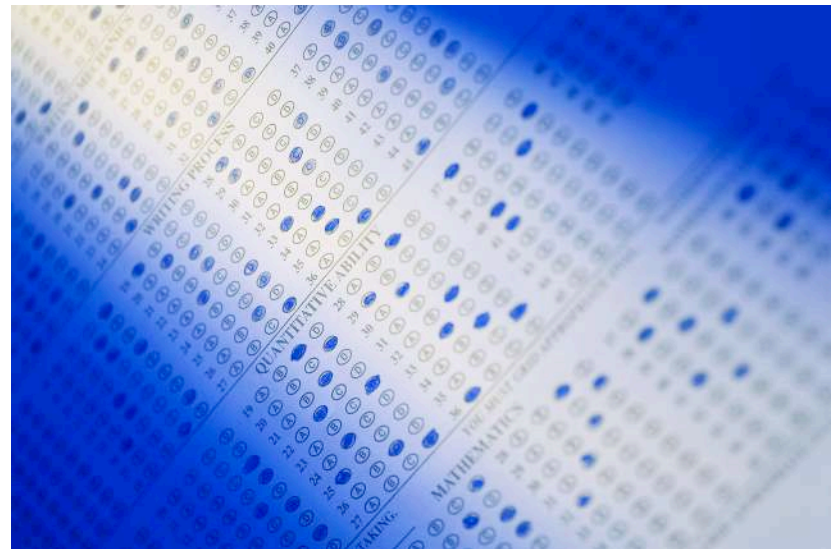


Cast

Content Validity

“Content validity is the extent to which a test measures only what it says it measures.”

Castenell & Castenell, 1998



Types of Bias:

- Gender Bias
- Cultural Bias
- Regional Bias
- Ethnic/Racial Bias
- Language Bias
- Socio Economic Status (SES) Bias
- Special Needs Bias



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Gender bias



Gender bias exists

- when males or females are depicted in a stereotypical manner.
- When males and females with the same skills and knowledge obtain different scores on a test.¹

Cultural Bias

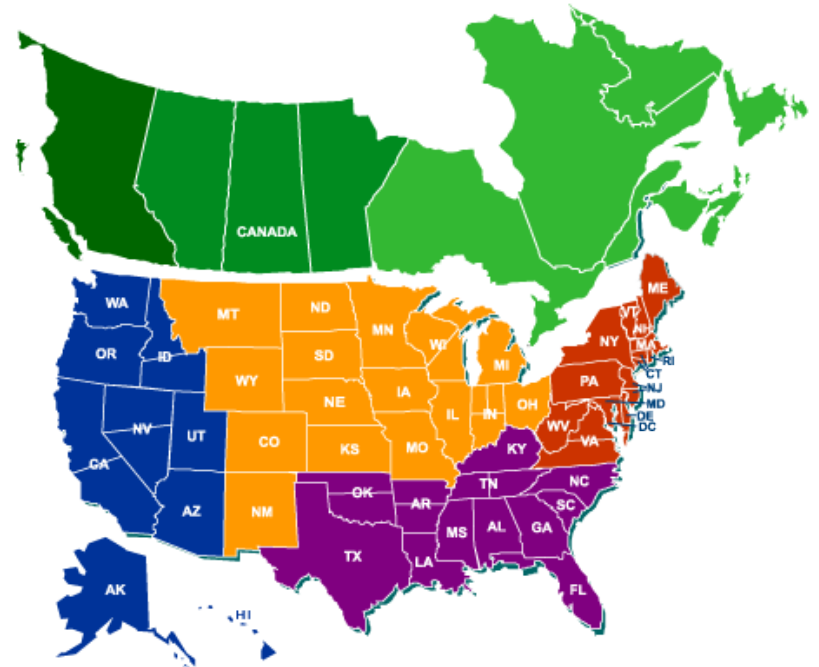
- A test is culturally biased when it makes assumptions about what is “common knowledge.”¹
- Examples: cultural norms and conventions, literary knowledge, conventions of language² etc.



- McGinley, S. (2002).
- ⑩ Del Rosario B. (1998)

Regional Bias

- A test has regional bias when people are penalized because of the use of regional names or dialects.
- Examples: sundrop, pop, bubbler, pies for pizzas (pizza pie) in NY, etc.

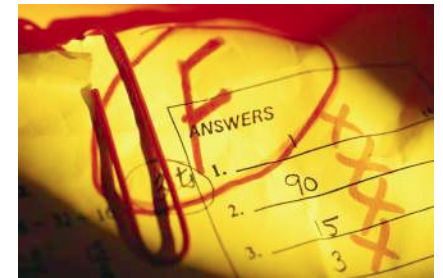
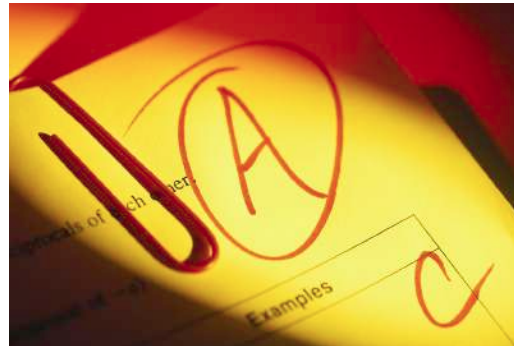


Ethnic and Racial Biases

Ethnic Bias or Racial Bias occurs

- When members of a group are portrayed in a stereotypical manner.
- When members of such groups obtain different scores than members of another group – with the same skills and knowledge¹.

■ Popham, 2006



Socio-Economic Bias

- Socio-economic bias occurs in tests when students are penalized based on their Socio-economic status¹:
 - the isolated, rural environment, the restrictive poverty of many families, and cultural ties with a tribe or other group deny many students important knowledge of the outside world².

□ Popham, 2006

1. Brescia & Fortune, 1988



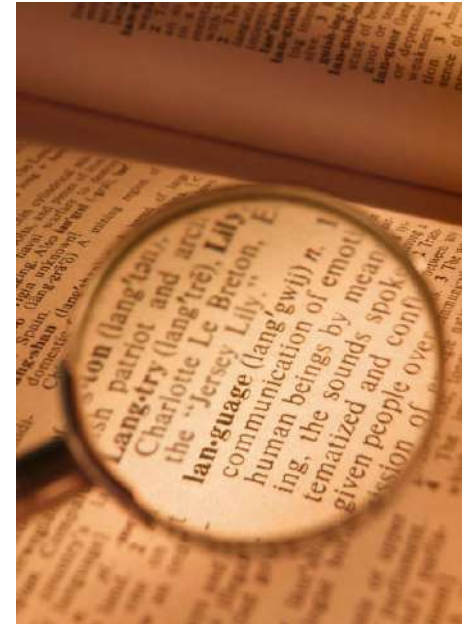
Language Bias

Language bias in tests occurs

- When second language learners are penalized because of their lack of
- knowledge of the English Language.

For example, by their inability to read the questions accurately, or to give appropriate verbal responses.

- Brescia & Fortune, 1988



Special Needs Bias

- According to Popham, a test is biased if it unfairly penalizes a group of students so that their performance is less than that of another group of students with the same achievement level with respect to the knowledge or skill being tested.



However, is it fair to test students using test items that we know do not match their ability levels?



What are the effects?

■ Emotional effects

- Students struggle with testing and its results and they question their own capabilities to learn. They lose confidence and the ability to take risks and become embarrassed and feel the need to “save face”.
- For children who haven't
- grasped English testing becomes a painful and humiliating experience.



Effects continued

- We are creating more achievement gaps between students, rather than helping them because we are testing groups unfairly.
- disabled students not given enough time to test.
 - ELL/ESL students have limited reading skills and can't even read the test and get no assistance.
 - Many students with special needs don't have fair achievement measures.



How do you identify bias?

■ Content Bias

-fair for all examinees

■ Language Bias

-Is the item free of group specific language, vocabulary, or reference pronouns

■ Item Structure and Format Bias

-Are there any flaws in the items to which members of DSI are differentially sensitive?

■ Stereotyping of Minorities

-Avoid material that is controversial, inflammatory, demeaning or offensive to members of DSI (designated subgroup of interest).

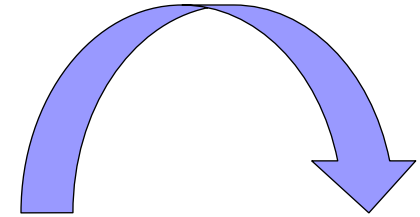


How do you identify bias?



- Is the test item fair for all examinees and free of annoying stereotypes?
- Are both sex groups recognized fairly?
- Is there a balance (across items in the test) of proper names? ethnic groups? activities for all groups (active, passive, neutral)? roles for both sexes (traditional, nontraditional, neutral)? adult role models (worker, parent)? character development (major, minor, neutral)? settings (suburban, urban, rural)?
- Will all examinees have equal opportunity to respond?
- and the list goes on.....

How do you change it?



- More qualified people must check and construct tests that are not biased. (This will cost money!)
- The federal and state governments must be willing to spend money to better understand tests and how to identify bias.
- We have a shortage of psychometricians-specialists who do the statistical work in test making and interpretations and we need more of these people trained to keep up with the demands of state testing by NCLB to ensure no test bias is occurring.
- Time, money, and qualified people.

Discussion Question:

- What evidence of test bias against minorities

do you



✓?

Let's see how you did on our minority biased test....

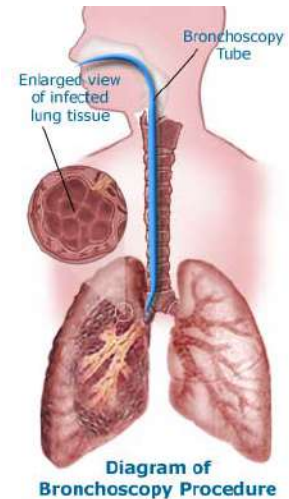
1. Your homeboy just told you he purchased a grill (fancy dental work) for abunches (a lot) of guap (money). How would you respond?
 - a. Ask if it was a mamom (ill gotten gain).
 - b. Ask how expansive (expensive) it was.
 - c. Ask him to sperlunk (cuddle).
 - d. Take a ride in his rut (car).

2. Your professor tells you to cut the gas (be quiet) or agitate the gravel (leave). What should you do?
 - a. Tell him you're earthbound (reliable).
 - b. Share your bread (money) with him.
 - c. Ask him if he's jacketed (going steady).
 - d. Shut your trap (stop talking). You're not an actor (show off).

3. We went to the north 40 to see if it was tall enough to use the Hydra-Swing next week. Based on this sentence, what is a Hydra-Swing?
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 - d. We will suck scar tissue out of a previous injury and look to make sure it is not infected and the scar tissue has been cleared away
5. What number comes next in the sequence, one, two, three, many?



6. What number comes next in the following sequence:
12 56 9 10 13

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- a. a bubble machine
 - b. a water fountain
 - c. a person that talks a lot
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8. Where are you most likely to find Sundrop?

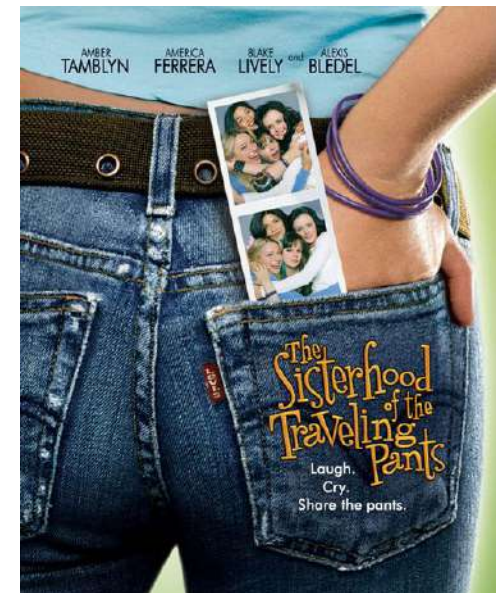
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- b. In Florida
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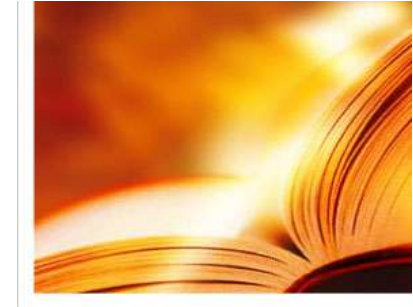
- a. Artero-ventricular hyper reticular retention
- b. Advanced very high resolution radiometer
- c. All vehicle hazard road runner
- d. Nothing; Velda made it up

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