Cold-Read Task

Read "Does IQ Test Really Measure Intelligence?" by Denise Mann. Then answer the questions.

1. Which sentence **best** summarizes Denise Mann's "Does IQ Test Really Measure Intelligence?"

   a. IQ tests do not adequately measure a person's intelligence.

   b. Traditional IQ tests provide a good measure of a person's intelligence.

   c. Multiple types of IQ tests should be performed to measure a person's intelligence.

   d. IQ tests can be a valid measure of intelligence if they include a variety of participants.

2. **Part A**

   How does the author in "Does IQ Test Really Measure Intelligence?" develop her central idea?

   a. Mann provides an objective summary of a new study on IQ tests.

   b. Mann provides quotations from several researchers which create confusion.

   c. Mann explains the results from a new study on IQ tests and introduces a counterpoint.

   d. Mann explains how the work of several researchers has oversimplified the research process.

   Part B

   Which statement from "Does IQ Test Really Measure Intelligence?" supports the answer to Part A.

   a. "Some very valuable research has been carried out using classical IQ tests."

   b. "I would suggest that it is both accurate and informative to measure multiple types of intelligence."

   c. "What's more, the study suggests that each type of intelligence may have its basis in a different set of brain areas."

   d. "A new study of more than 100,000 participants suggests that there may be at least three distinct components of intelligence."

Grade 8: Flowers for Algernon

3. Which quotation **best** explains whether the reasoning in "Does IQ Test Really Measure Intelligence?" is proven accurate?

   a. "It is time to move on to using a more comprehensive set of tests that can measure separate scores for each type of intelligence."

   b. "To come up with one unifying score and use that to determine a person's overall ability is fraught with problems."

   c. "The entire test took about 30 minutes to complete."

   d. "This is a really compelling study of an extraordinarily large number of people taking tests with a careful data analysis."

Read "IQ Tests are 'Meaningless and Too Simplistic' Claim Researchers" by Nicholas McDermott. Then answer the questions.

4. **Part A**

   What is the author's purpose in "IQ Tests are 'Meaningless and Too Simplistic' Claim Researchers"?

   a. To persuade the Mensa society to change their scoring policies on the IQ tests to indicate intelligence.

   b. To explain that IQ tests only measure certain aspects of intelligence and should not be viewed as an indicator of intelligence.

   c. To provide information on the structured assessment format of IQ tests to ensure accurate information on intelligences of many people.

   d. To clarify that new versions of the IQ test have been launched over the years since its implementation during the 1950s-1960s.

   Part B

   Which evidence from Nicholas McDermott's "IQ Tests are 'Meaningless and Too Simplistic' Claim Researchers" **best** supports the answer to Part A?

   a. "They use the Cattell III B tests, which consist of six batches of multiple-choice questions aimed at testing mental agility."

   b. "IQ tests are pretty meaningless--if you are not good at them, all it proves is that you are not good at IQ tests."

c. "The average IQ is 100. Mensa, the high IQ society, only accepts individuals who score more than 148, putting them in the top two per cent of the population."

d. "The researchers are set to continue the groundbreaking study, with the team launching a new version of the tests online."

5. **Part A**

Which sentence provides information from McDermott's "IQ Tests are 'Meaningless and Too Simplistic' Claim Researchers" that contradicts information from Mann's "Does IQ Test Really Measure Intelligence?"

a. IQ tests do not provide researchers with a true understanding of one's intelligence.

b. Traditional IQ tests are best interpreted by studying more than one element.

c. Traditional IQ tests reflect a different way of life than we experience today.

d. IQ tests have very little value in today's society.

Part B

Which evidence from Nicholas McDermott's "IQ Tests are 'Meaningless and Too Simplistic' Claim Researchers" **best** supports the answer to Part A?

a. "The majority of IQ tests were developed in the 50s and 60s when the way we thought and interacted with the world was different."

b. "This really is a wake-up call. We have shown that on the evidence, these tests are meaningless."

c. "The best we could manage is to get it down to three elements that contribute to intelligence."

d. "We need to stop trying to simplify the brain, which is a very complicated organ, down to a number."

6. Complete the chart below to identify where "Does IQ Test Really Measure Intelligence?" and "IQ Tests are 'Meaningless and Too Simplistic' Claim Researchers" agree and disagree.

- Column 2: Identify whether the texts agree or disagree on the topic in Column 1. Write **AGREE** or **DISAGREE**.
- Column 3: Locate evidence that supports your whether the texts agree or disagree on the topic in Column 1. Evidence can be a summary of similarities or direct quotations from one or both texts. Be sure to include the text title with direct quotations.
- Column 4: If you write DISAGREE in Column 2, identify if the disagreement is based on different facts or different interpretation of the same facts. Write **FACTS** or **INTERPRETATION**. Leave this column blank if you write AGREE in Column 2.

Column 1	Column 2	Column 3	Column 4
	Write **AGREE** or **DISAGREE**	Evidence	Write **FACTS** or **INTERPRETATION**
Research on IQ tests			
What IQ tests measure			
Usefulness of IQ tests			

7. Read these sentences from Progress Report 10 (April 21) from "Flowers for Algernon" by Daniel Keyes.

> **I'm not sure what an I.Q. is. Dr. Nemur said it was something that measured how intelligent you were—like a scale in the drugstore weighs pounds. But Dr. Strauss had a big argument with him and said an I.Q. didn't weigh intelligence at all. He said an I.Q. showed how much intelligence you could get, like the numbers on the outside of a measuring cup. You still had to fill the cup up with stuff. Then when I asked Burt [. . .] he said that both of them were wrong [. . .]. Burt says that the I.Q. measures a lot of different things including some of the things you learned already, and it really isn't any good at all.**

Write multiparagraph essay that explains which character's opinion (Dr. Nemur, Dr. Strauss, or Burt) is most supported by "Does IQ Test Really Measure Intelligence?" and "IQ Tests are 'Meaningless and Too Simplistic' Claim Researchers." Cite evidence from the both texts to support your response. Be sure to observe the conventions of standard English.

WebMD

Does IQ Test Really Measure Intelligence?

By Denise Mann

FROM THE WEBMD ARCHIVES

Dec. 20, 2012 -- Single tests that measure intelligence quotient, or IQ, may become a thing of the past.

A new study of more than 100,000 participants suggests that there may be at least three distinct components of intelligence. So you could not give a single, unified score for all of them.

Researchers' understanding of the complexities of the human brain has evolved, and so too has the notion of IQ, what it really means, and how it is most accurately captured.

“There are multiple types of intelligence,” says researcher Adam Hampshire, PhD. He is a psychologist at the Brain and Mind Institute Natural Sciences Centre in London, Ontario, Canada. “It is time to move on to using a more comprehensive set of tests that can measure separate scores for each type of intelligence.”

Using Many IQ Tests

In the study, all participants were invited to take a series of 12 online tests that measure memory, reasoning, attention, and planning as well as information on the test takers' background and lifestyle. The entire test takes about 30 minutes to complete.

According to the findings, there are at least three components that affect overall performance on tests. These include short-term memory, reasoning, and verbal recall.

Lifestyle factors count, too. For example, gamers -- or people who play a lot of computer games -- score higher on tests of reasoning and short-term memory. Smokers do poorly on tests assessing short-term memory and vocabulary, while test takers who have anxiety don't do as well on short-term memory tests, the study shows.

What’s more, the study suggests that each type of intelligence may have its basis in a

different set of brain areas. Researchers used sophisticated brain scans called functional MRIs to map out these areas. “Potentially, we can measure a more comprehensive set of intelligences," each of which reflects the capacity of a different part of the brain, Hampshire says.

RIP IQ Test?

So should the IQ test that has provided bragging rights for so many be discontinued or discredited?

Not so fast, he says. “Some very valuable research has been carried out using classical IQ testing. However, IQ is a massive oversimplification of the spectrum of human cognitive ability.”

IQ scores may also be somewhat misleading, Hampshire says. “Based on the results of our study, it seems likely that IQ differences will vary in scale or even direction depending on the exact type of intelligence that the test or set of tests rely most heavily upon. I would suggest that it is both more accurate and informative to measure multiple types of intelligence.” He plans to see if there are other types of intelligence that were not captured in this study.

Hampshire said the findings themselves weren’t all that surprising, but the number of people who took part in the study exceeded expectations. “I had thought a couple of thousand people might log in and participate in the study over the course of six months. Instead, tens of thousands logged in within the space of a few weeks,” he says. It was a remarkably strong response from members of the general public, who gave half an hour or more of their time to support this research.”

John Gabrieli, PhD, professor of brain and cognitive science at MIT in Boston, reviewed the study for WebMD. “This is a really compelling study of an extraordinarily large number of people taking tests with a careful data analysis. It makes the case against the idea that IQ is localized in one part of the brain. We imagine that there is THE test of intelligence, but you can measure it in many ways. One measure may make a person seem super-intelligent, but if they picked another, they may seem average. There are multiple kinds of intelligence that can link to various tasks and different parts of the brain.”

Gayatri Devi, MD, agrees with the new study findings. She is an attending neurologist at Lenox Hill Hospital in New York City. “To come up with one unifying score and use that to determine a person’s overall ability is fraught with problems,” she says. “We need to get away from that.”

The study appears in the journal Neuron.
WebMD Health News | Reviewed by Laura J. Martin, MD on December 20, 2012

Sources

SOURCES:

Gayatri Devi, MD, attending neurologist, Lenox Hill Hospital, New York.

John Gabrieli, PhD, professor, brain and cognitive science, MIT, Boston.

Hampshire, A. *Neuron*, study received ahead of print.

Adam Hampshire, PhD, psychologist, Brain and Mind Institute Natural Sciences Centre, London, Ontario, Canada.

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IQ Tests Are 'Meaningless and Too Simplistic' Claim Researchers

Nicholas McDermott, Daily Mail (London), December 19, 2012

It will come as a relief to those who failed to shine when taking an IQ test.

After conducting the largest ever study of intelligence, researchers have found that far from indicating how clever you are, IQ testing is actually rather 'meaningless'.

In a bid to investigate the value of IQ, scientists asked more than 100,000 participants to complete 12 tests that required planning, reasoning, memory and attention.

They also filled in a survey on their background.

They discovered that far from being down to one single factor, what is commonly regarded as intelligence is influenced by three different elements – short-term memory, reasoning, and verbal ability.

But being good at one of these factors does not mean you are going to be equally gifted at the other two.

Scientists from Canada's Western University in Ontario, also scanned some of the participants' brains while they undertook the tests.

They found that different parts of the brain were activated when they were tested on each of the three factors.

Traditional IQ tests are 'too simplistic', according to the research, which found that what makes someone intelligent is too complex to boil down to a single exam.

IQ, which stands for Intelligence Quotient, is an attempt to measure how smart an individual is.

The average IQ is 100. Mensa, the high IQ society, only accepts individuals who score more than 148, putting them in the top two per cent of the population.

They use the Cattell III B test, which consists of six batches of multiple choice questions aimed at testing mental agility, with each section lasting between eight and 18 minutes.

The new study, published in the journal Neuron, suggests that intelligence is too complex to be represented by a single number.

Study leader Dr Adrian Owen, a British neuroscientists based at Western University in Canada, said an 'astonishing' number of people had contributed to the research.

'We expected a few hundred responses, but thousands and thousands of people took part, including people of all ages, cultures and creeds and from every corner of the world,' he said.

'When you take 100,000 people and tested their brain function, we couldn't find any evidence for a single uniform concept of intelligence.

'The best we could manage is get it down to three elements that contribute to intelligence. But they are completely different factors, unrelated to one another, and you could be brilliant at one and awful at another.

For example, the absent-minded professor.

‘IQ tests are pretty meaningless – if you are not good at them, all it proves is that you are not good at IQ tests.

‘It does not say anything about your general intelligence.’ The majority of IQ tests were developed in the 50s and 60s when the way we thought and interacted with the world was different, said Dr Owen.

‘Study co-author Roger Highfield, from the Science Museum, said: ‘The most surprising thing is that we still haven’t got over the hang up about IQ tests.

‘This really is a wake-up call. We have now shown that on the evidence, these tests are meaningless.

‘We need to stop trying to simplify the brain, which is very complicated organ, down to a number.

‘We need to think of intelligence like the Olympics. Is the gold medal winner in the marathon fitter than the gold medallist in the 100m sprint?’