ISS 305

Evaluating Evidence: Becoming a Smart Research Consumer

3. Empirical vs. non-empirical statements

Reminder: Turn on your I<CLICKER

Base is A or AA

ISS 305: Mini-quiz Question 1

- _____ is the canon of science that states that if we have two or more competing theories, we should choose the more frugal of the two.
 - A) Empiricism
 - B) Determinism
 - C) Testability
 - D) Parsimony

ISS 305: Mini-quiz Question 2

What's wrong with the following as an empirical statement?:

"There are more students in our section of ISS 305 than any rational instructor would want."

- A. it contains vague language that makes it very unclear just what observations would verify or falsify it
- B. it is false
- C. it cannot be proven or disproven with current technology
- D. nothing (this is a perfectly good empirical statement)

ISS 305: Mini-quiz Question 3

What's wrong with the following as an empirical statement?:

"There are over 2000 students in the Fall 2016, Section 1 [our section] of ISS 305."

- A. it's not clear what observations would verify it
- B. it's not clear what observations would falsify it
- C. it is false
- D. it cannot be proven or disproven with current technology
- E. nothing (this is a perfectly good empirical statement)

What's wrong with the following as an empirical statement?:

"There will be exactly 254 students who will enroll in ISS 305 during the Spring 2017 semester."

- A. it's not clear what observations would verify it
- B. it's not clear what observations would falsify it
- C. it is true
- D. it cannot be proven or disproven with current technology
- E. nothing (this is a perfectly good empirical statement)

ISS 305: Mini-quiz Question 5

What's wrong with the following as an empirical statement?:

"My dreams foretell the future (eventually)."

- A. it's not clear what observations would verify it
- B. no observations could falsify it
- C. it is false
- D. nothing (this is a perfectly good empirical statement)

This is not a good question (A and B are both somewhat right). I would not spend much time thinking about this question.

ISS 305: Mini-quiz Question 6 All of the following are true of empirical statements EXCEPT:

- A. They cannot be proved true with certainty.
- B. They are true.
- C. They cannot be proved false with certainty.
- D. Their assessment can depend on indirect observations or on others' observations.

ISS 305: Mini-quiz Question 7

What's wrong with the following as an analytic statement?:

"A <u>Skeptic</u> is someone who believes it is never really possible to know anything"

- A. nothing, it's a tautology
- B. nothing, it's a contradiction
- C. it uses words that don't appear in my dictionary
- D. it is not a statement about the meaning of words, but about aspects of the world that require observation to check its truth

What's wrong with the following as an analytic statement?:

"A <u>Skeptic</u> is someone who never doubts anyone's claims"

- A. nothing, it's a tautology
- B. nothing, it's a contradiction
- C. it uses words that don't appear in my dictionary
- D. it is not a statement about the meaning of words, but about aspects of the world that require observation to check its truth

ISS 305: Mini-quiz Question 9

What's wrong with the following as an analytic statement?:

"Another way of saying '...and so forth' is et cetera."

- A. nothing, it's a tautology
- B. nothing, it's a contradiction
- C. it uses words that don't appear in my dictionary
- D. it is not a statement about the meaning of words, but about aspects of the world that require observation to check its truth

ISS 305: Mini-quiz Question 10

What's wrong with the following as an analytic statement?:

"There were more self-described skeptics in the class after the lecture was over than before it began"

- A. nothing, it's a tautology
- B. nothing, it's a contradiction
- C. it uses words that don't appear in my dictionary
- D. it is not a statement about the meaning of words, but about aspects of the world that require observation to check its truth

ISS 305: Mini-quiz Question 11

"I hate broccoli." This is best classified as a(n) statement.

- A. empirical
- B. semantic
- C. attitude
- D. value
- E. metaphysical

"Broccoli is a a cultivated plant whose leafy stalks and clusters of usually green buds are eaten as a vegetable." This is best classified as a(n) statement.

- A. semantic
- B. attitude
- C. value
- D. metaphysical

ISS 305: Mini-quiz Question 13

"The Greek gods sitting at the top of Mount
Olympus ate nothing but broccoli." This is best classified as a(n) ______ statement.

- A. empirical
- B. semantic
- C. attitude
- D. value
- E. metaphysical

ISS 305: Mini-quiz Question 14

"A diet rich in broccoli helps prevent colon cancer."

This is best classified as a(n) _____
statement.

- A. empirical
- B. semantic
- C. attitude
- D. value
- E. metaphysical

ISS 305: Mini-quiz Question 15

Which of the following is the **best** example of a <u>value</u> statement?

- A. 47% of Americans pay no income tax
- B. Among most politicians and citizens, a freeloader is someone who is "dependent upon government and unwilling to take responsibility for themselves"
- C. Paying income tax is a good thing

Which of the following is an empirical statement?

- A. Happiness is a warm gun.
- B. There are no guns in heaven.
- C. Suicide is more likely when there's a gun in the house
- D. A gun is harmful because it is a weapon.