Attachment 1

Simulations for Drug Related Science Education (NIDA)

Submission date 7/20/11

Burden Disclosure Statement for References

Public reporting burden for this collection of information is estimated to average 25-minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to: NIH, Project Clearance Branch, 6705 Rockledge Drive, MSC 7974, Bethesda, MD 20892-7974, ATTN: PRA (0925-XXXX). Do not return the completed form to this address.

Instructions (PRE-TEST):

The purpose of this questionnaire is to get some information about your knowledge and attitudes related to biology and drug use on the body. It should take about 25 minutes to complete.   PLEASE CIRCLE ONLY ONE ANSWER FOR EACH QUESTION, UNLESS THE QUESTION SAYS OTHERWISE. Please answer each question as best and as honestly as you can. . Thank you for your time and participation in this important evaluation.

BIOGRAPHICAL INFORMATION

YOUR DATE OF BIRTH: ●● / ●● / ●●

                           Month   day   year

LAST 4 DIGITS OF YOUR PHONE NUMBER

●●●●

**If no home phone number, please use locker number.

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1. YOUR GRADE:

    A. 10TH
    B. 11TH

2. YOUR GENDER: A. Male
                         B. Female

3. RACE/ETHNICITY: Please select one one or more categories
                     Ethnicity:
--   Hispanic or Latino
--   Not Hispanic or Latino

                     Please select one or more categories
                     Race:
--   American Indian or Alaska Native
--   Asian
--   Black or African American
--   Native Hawaiian or Other Pacific Islander

Knowledge Questions
Match the various parts of the brain are responsible for the various function:

_____1. Cerebral Cortex   A. Balance
_____2. Amygdala   B. Breathing
_____3. Brain stem   C. Fear
_____4. Cerebellum   D. Higher learning

 5. Neurons are the network of specialized cells within the
           A   B   C   D
         Heart   Lungs   Brain   Kidney

6. The synapse is the space between two:
           A   B   C   D
Adjacent heart beats   Adjacent neurons   Adjacent lungs   Adjacent blood vessels

8. An example of a neurotransmitter is:
      A   B   C   D
Dopamine   ADH   Steroids   TCH

9. The organs of the body receive blood from the:
      A   B   C   D
Arteries   Nerves   Veins   Airways

10. The organ responsible for drawing oxygen into the body is:
     A   B   C   D
Heart   Lung   Brain   Kidney

11. Cocaine stimulates the release of what brain chemical (neurotransmitter)
      A   B   C   D
Oxygen   Adrenaline   Dopamine   Carbon

12. The way that cocaine causes stimulation is:
A. Large amounts of dopamine leak out of the bloodstream
B. Brain cells(neurons) absorb the excess dopamine, which causes the neurons to be re-stimulated
C. It sends excessive amounts of oxygen into the blood stream
D. It restricts the amount of dopamine leaked out into the bloodstream

13. The "low" of cocaine is caused by:
A. Lowered dopamine stores in the brain
B. Lowered dopamine stores in the heart
C. Lowered dopamine stores in the lung
D. Lowered dopamine stores in the kidney

14. Cocaine's stimulant effect on the brain can lead to:
      A   B   C   D

| Seizures | Muscle pain | Trouble breathing | Double vision |

15. A stroke can occur in a cocaine user when:
A. Blood vessels in the heart expand
B. Blood vessels in the brain constrict, causing decreased blood flow to a portion of the brain
C. Too much oxygen is released into the bloodstream
D. Too much alcohol is released in the bloodstream

16. Cocaine can cause the following symptom:

A	B	C	D
Nosebleed	Itchy rash	Hair Loss	Yellow Skin

17. Cocaine causes adrenaline release leading to:

A	B	C	D
Slowing of the heart rate	Memory loss	Rapid and irregular heart beating	Decreased oxygen in the bloodstream

18. Cocaine can cause a heart attack by:
A. Constricting a blood vessel within the heart
B. Expanding a blood vessel within the heart
C. Expanding blood vessels in the kidney
D. Causing the lungs to collapse

19. Respiratory problems can result from smoking cocaine by:
A. Causing the airways of the lungs to widen
B. Causing the heart to slow down
C. The lungs becoming overfilled with oxygen
D. Causing the airways of the lungs to squeeze closed

20. Bleeding within the brain after taking cocaine can be caused by
A. A rapid rise in blood pressure causing blood vessels in the brain to burst
B. A rapid decrease in blood pressure
C. A rapid increase of oxygen levels in the blood
D. Dopamine entering the brain and breaking down blood vessels

21. Cocaine can cause which of the following problems pregnancy:
A. Oversized baby
B. Bleeding
C. Too much oxygen for the baby
D. Excess weight gain in mother

22.Marijuana exerts its effects on the brain by:
A. Dissolving cannaboid receptors
B. Binding to cannaboid receptors
C. Multiplying cannaboid receptors
D. Dissolving opium receptors

23. THC,the active component in marijuana is :
A. A liquid
B. A molecule
C. A protein
D. An acid

24. Which areas of the brain contain large amounts of cannaboid receptors?
A. Cerebellum(balance center)
B. Gyri
C. Spinal Cord
D. Brain stem

25. Marijuana can effect the eyes by:
A. Causing blindness
B. Causing redness
C. Improving vision
D. Causing eye pain

26. Smoking marijuana can increase risk of heart attack by:
A. Lowering heart rate and blood pressure
B. Increasing heart rate and blood pressure
C. Increasing oxygen in blood
D. Increasing alcohol levels in blood

27. Which of the following are increased with marijuana use:
A. Stomach ulcers
B. Rashes
C. Lung tumors(cancer)
D. Excess oxygen in the lungs

28. Lung effects of marijuana use include:
 A. Increased breathing rate
 B. Increased cough,phlegm and lung infections
 C. Increased oxygen in the lungs
 D. Decreased number of lung infections

29. Marijuana weakens the immune system by:
A. Raising the body's temperature
B. Decreasing the number of cells that fight infection
C. Increasing the number of cells that fight infection
D. Lowering the body's temperature

Drug use attitudinal questions

30. I believe using drugs is **harmful to my health**

A	B	C	D	E
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

31. I believe that drug use can have a negative **impact on school performance**.

A	B	C	D	E
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

32. I would be **comfortable refusing drugs** if they were offered to me.

A	B	C	D	E

| Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |

33. I believe that drug use can have a negative **impact on personal relationships**.

A	B	C	D	E
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

34. I believe that **using drugs** is okay every once and awhile.

A	B	C	D	E
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

35. I believe that using drugs with friends is a **good way to socialize on the week-ends**.

A	B	C	D	E
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

36. I believe that **using drugs** is part of growing up.

A	B	C	D	E
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

<u>Science Attitudinal Questions</u>

37. I enjoy science classes

A	B	C	D	E
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

38. I would like to continue to take science classes after this year

A	B	C	D	E
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

39. I would like to study science after I graduate from high school

A	B	C	D	E
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

40. In the future, I would like to have a job that involves some type of science (ex. Nurse, XXX)

A	B	C	D	E
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

41. Science classes are fun

A	B	C	D	E
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

42. I like the activities we do in science class

A	B	C	D	E
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

43. Science classes are interactive

A	B	C	D	E
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

44. I see the benefit of studying science

A	B	C	D	E
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

45. I understand how science is a part of everyday life and the activities I participate in

A	B	C	D	E
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

46. I enjoy learning on the computer

A	B	C	D	E
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

47. I like using computers in school

A	B	C	D	E
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

48. I believe that computers can be good educational tools

A	B	C	D	E
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

49. Sometimes I get confused when using a computer

A	B	C	D	E
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

50. Using a computer based education is fun

A	B	C	D	E
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

Post Test

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