1

Which of the following is not an ethical guideline, according to the APA?

(A) Scientists should not create a situation in which the intensity of participants' emotions surpasses those they typically experience in daily life

(B) Emotions should be induced in the lab by experiences that are likely to be encountered in everyday life, rather than by very unusual interventions

(C) Emotions should be extinguishable and alleviated before the participant leaves

(D) Scientists should never deceive or mislead subjects in any way; participants should always know the full purpose of the experiment

(E) All of the above are ethical guidelines

Answer: (D) Scientists should never deceive or mislead subjects in any way; participants should always know the full purpose of the experiment

Feedback: While the APA suggests using deception only when it is truly necessary, deception is commonly used in psychology research, and if participants know the complete purpose of the study, there will likely be undesired experimenter demands

2

What is one way to minimize experimental demand?

(A) Use a cover story in your study

(B) Give participants plenty of breaks throughout the task

(C) Tell participants up front exactly what hypothesis you are testing

(D) Use random assignment

Answer: (A) Use a cover story in your study

Feedback: Researchers often give cover stories to participants as deceptive explanations for the various tasks involved so that participants do not guess the true purpose of the study

3

In a psychology study, you are asked to rate how much you agree with a statement (""I am very happy with my life right now"") on a scale from 1 (strongly disagree) to 7 (strongly agree). This is an example of what type of question?

(A) Multiple choice question

(B) Self-Assessment Manikin

(C) Likert item

(D) Differential Forced-Choice Emotion item

Answer: (C) Likert item

4

What are the benefits of the Self-Assessment Manikin (SAM) compared to other mood measures, like the Positive and Negative Affect Schedule (PANAS)?

(A) It can be used with children and adults, and across different cultures, without the need for translation

(B) It is better validated than the PANAS

(C) It measures discrete emotion states better than other scales

(D) All of the above

Answer:

(A) It can be used with children and adults, and across different cultures, without the need for translation

Feedback: The SAM is nonverbal, so it works across different cultural and age populations. It is not, however, necessarily better validated than the PANAS. It also only measures arousal and valence, so it does not differentiate between discrete emotions

5

What is one benefit of using the Facial Action Coding Scheme (FACS) to code facial expressions?

(A) It is highly efficient for coding large quantities of video

(B) It does not require much training or knowledge to apply

(C) It is subjective and gives the coder flexibility in deciding what emotion a face is expressing

(D) It is highly standardized and thoroughly describes all possible movements of facial muscles

Answer:

(D) It is highly standardized and thoroughly describes all possible movements of facial muscles

Feedback: A and B are untrue; in fact, the inefficiency of hand-coding and the amount of training it requires to become a coder are two major downsides to FACS. C is untrue because it is rigorous and standardized with good inter-rater reliability, so little coder subjectivity is introduced

6

Why might a researcher choose to use electromyography (EMG) to quantify facial muscle activity instead of Facial Action Coding Scheme (FACS) ratings?

(A) If the researcher wants to easily measure the movement of all facial action units

(B) If the researcher is interested in detecting small muscle contractions that are not visible to observers

(C) If the participant needs to be active and moving around during the experimental procedure

(D) If the facial expressions of the participant are expected to be big and exaggerated

Answer:

(B) If the researcher is interested in detecting small muscle contractions that are not visible to observers

Feedback: The advantage of EMG is its ability to pick up tiny muscle contractions that would not be visible to coders. A disadvantage is the fact that you need a separate electrode on every muscle group you want to measure (so A is incorrect), and participants need to be rather still and have wires hooked up to them (so C is incorrect)

7

Which of the following is NOT considered a part of the

peripheral nervous system?

(A) Cranial nerves

(B) Spinal nerves

(C) Autonomic nerves

(D) Spinal cord

Answer:
(D) Spinal cord

8

Which of the following neuroscientific terms is not matched with a correct definition?

(A) Action potential: electric impulse that travels down the axon of a neuron

(B) Synapse: the space between two neurons

(C) Electroencephalography (EEG): A brain imaging technique that measures blood oxygenation in the brain

(D) Cortex: the outer layer of the brain

Answer:
(C) Electroencephalography (EEG): A brain imaging technique that measures blood oxygenation in the brain

Feedback: EEG measures electric potential in the brain, not blood oxygenation (that's fMRI)

9

Which brain imaging technique is good for temporal precision (timing) but bad if you are interested spatial precision (location)?

(A) Electroencephalography (EEG)

(B) Functional magnetic resonance imaging (fMRI)

(C) Magnetic resonance imaging

(D) Positron emission tomography (PET) scan

Answer:
(A) Electroencephalography (EEG)

Feedback: EEG is temporally precise but poor for identifying where in the brain activity is changing; the other three are not very temporally precise but are (relatively) good for identifying active areas in the brain

10

What is the key difference between magnetic resonance imaging (MRI) and functional magnetic resonance imaging (fMRI) that makes it so useful for neuroscientists?

(A) MRI only works on people while they are sedated, and fMRI only works on people while they are awake

(B) MRI shows the structure of the brain (anatomy), while fMRI shows changes in

Answer:
(B) MRI shows the structure of the brain (anatomy), while fMRI shows changes in activity levels across brain areas over time

activity levels across brain areas over time

(C) MRI is used for other parts of the body, while fMRI can be used on the brain

(D) MRI cannot tell you about differences in brain functioning across people, while fMRI can be used to compare people

11

The sympathetic nervous system is responsible for what processes?

(A) It allows the body to unwind and recover after stress

(B) It prepares the body for action (""fight or flight"")

(C) It prepares the body to digest food and rest (""rest and digest"")

(D) It decreases heart rate

Answer:
(B) It prepares the body for action (""fight or flight"")

12

What does the somatic nervous system control?

(A) Skeletal muscles

(B) Smooth muscles of the organs

(C) Digestive system

(D) Cortisol

Answer:
(A) Skeletal muscles

13

Which measure of emotion is prone to the following methodological issues: high experimental demand, difficulty in using it across multiple cultures and age groups, and highly subjective?

(A) Functional magnetic resonance imaging (fMRI)

(B) Measures of autonomic nervous system, like pupillary dilation and skin conductance

(C) Facial electromyography (EMG)

(D) Language-based questionnaires

Answer:
(D) Language-based questionnaires

14 **Which measure of emotion is most invasive?**

(A) Language-based questionnaires

(B) Self-Assessment Manikin (SAM)

(C) Functional magnetic resonance imaging (fMRI)

(D) Facial Action Coding Scheme (FACS)

Answer:
(C) Functional magnetic resonance imaging (fMRI)

15 **What is experimental demand?**

(A) How mentally taxing an experiment task is for a subject

(B) The requirement that experiments involve random assignment to conditions

(C) How rigorously the experimenter controls for potential confounding variables

(D) How easy it is for experimental participants to guess what a study is designed to test

Answer:
(D) How easy it is for experimental participants to guess what a study is designed to test

16 **A scientist distributes beepers to participants in a longitudinal study about the effect of social interaction on emotions. The researcher asks the participants to complete a brief questionnaire every time the beeper goes off, which occurs randomly throughout the day. This is an example of what data collection schedule?**

(A) Interval-contingent responding

(B) Signal-contingent responding

(C) Event-contingent responding

(D) Reward-contingent responding

Answer:
(B) Signal-contingent responding

Feedback: Because they respond when prompted, rather than in response to a category of events, and because the intervals are random, this is signal-contingent responding

17 **What is the International Affective Picture System?**

(A) A well-validated set of pictures of emotional scenes chosen to elicit a variety of positive and negative affective states

(B) A large database of photos of facial

Answer:
(A) A well-validated set of pictures of emotional scenes chosen to elicit a variety of positive and negative affective states

expressions produced by people from different cultures that allows researchers to study the perception of facial expressions

(C) A time-consuming technique for coding facial expressions in which trained coders analyze photos for changes in the facial action units

(D) A set of nonverbal Likert-type scales involving line drawings of manikins that participants can use to indicate their feeling states

Feedback: Choice B describes some sort of facial expression stimulus set; choice C describes FACS; choice D describes SAM

18 **Which emotion induction technique depends the most on the participant's own experiences and will therefore likely have more variability across participants?**

(A) Viewing validated affective images

(B) Recalling emotional memories

(C) Listening to validated evocative music

(D) Viewing validated affective video clips

Answer: (B) Recalling emotional memories

Feedback: Stimuli sets involving images, music, and video clips have been validated across contexts and participant populations, so are relatively consistent in their effects. Using memory recall as an emotion induction, on the other hand, introduces more variability into an experiment because participants vary in the intensity of their emotions and the vividness with which they recall them

19 **Schwarz and Clore (1983) investigated the use of emotional memory retrieval as an emotion induction strategy. They showed that how a participant recalls a memory determines whether an emotion is elicited. What specifically did they conclude?**

(A) As long as participants can remember the details of their chosen memory, they will automatically re-experience the associated emotions at full intensity

(B) People tend to remember happy memories better than sad or fearful memories, so this strategy should only be used in the study of positive affect

(C) People are very bad at remembering how past events made them feel, since memories are generally not colored by emotions

(D) Recalling an emotional memory does not necessarily reactivate the original emotion, so participants must be encouraged to focus on the emotional aspects of the memory

Answer: (D) Recalling an emotional memory does not necessarily reactivate the original emotion, so participants must be encouraged to focus on the emotional aspects of the memory

Feedback: Choice A is incorrect because it is basically the opposite of what the researchers concluded. Choice B is incorrect; in fact, evidence suggests there is a negativity bias in memory. Choice C is incorrect because emotions are an inherent aspect of episodic memory and learning

20 **What does it mean when we say a stimulus set, such as the International Affective Picture System, is ""validated"" and**

""standardized""?

(A) Depending on the individual participant, the stimuli have a range of emotional effects, granting the researcher ample variability in their independent variable

(B) The stimuli are highly familiar to the average participant, such as movies most people have seen

(C) The stimuli were selected and pretested to ensure that they have the intended emotional effect across participant samples

(D) The stimuli will only work for a very specific, ""standard"" participant sample, such as college students

Answer:
(C) The stimuli were selected and pretested to ensure that they have the intended emotional effect across participant samples

21

Which of the following statements about using film clips to induce emotions is true?

(A) Film clips are effective at altering participants' arousal levels, but have never successfully elicited more specific emotion states

(B) Researchers have never thoroughly validated the existing film clip databases, so their effects on participants' emotion states are unclear

(C) Film clips have been shown to induce a variety of discrete emotion states, such as amusement, anger, disgust, and sadness

(D) Attempts to create validated film clip stimuli sets have revealed that movies are deeply personal and therefore it is not possible to induce consistent emotion states within multiple participants

(E) All of the above statements are true

Answer:
(C) Film clips have been shown to induce a variety of discrete emotion states, such as amusement, anger, disgust, and sadness

Feedback: Several well-validated video stimuli sets exist for inducing discrete emotion states, and they are quite effective across participants

22

Which of the following statements about the relationship between emotions and music is true?

(A) Songs can have person-specific emotional effects if, for instance, the individual associates the song with an emotional memory

(B) Songs can have general and predictable emotional effects across participants because of universal links between emotion and properties of music, such as dissonance and tempo

Answer:
(D) All of the above statements are true

Feedback: A and B are not mutually exclusive, even though most emotion research takes advantage of B rather than A. Research indicates that music causes subjects to feel more subdued affective states like calm, meditative, somber, sensual, etc. rather than

(C) Research suggests that music tends to elicit subtle and diffuse affective states rather than intense, discrete emotions

highly discrete emotion states

(D) All of the above statements are true

23 **In a psychology experiment, what is a ""confederate""?**

(A) A fake participant who is a part of the experimental manipulation

(B) A type of debriefing script where the participant is informed of the deception involved in the study

(C) A participant who figures out the purpose of the study partway through and behaves the way they think the experimenter wants them to behave

(D) A control condition participant in a quasi-experiment

Answer:
(A) A fake participant who is a part of the experimental manipulation

24 **What approach to studying emotions sacrifices experimental control for ecological validity?**

(A) Measuring naturally occurring emotions

(B) Memory recall emotion induction

(C) Inducing emotions with evocative videos

(D) Scripted social interactions

Answer:
(A) Measuring naturally occurring emotions

Feedback: Measuring naturally occurring emotions gives researchers a chance to examine much more ecologically valid and, oftentimes, more intense emotions, but at the expense of random assignment and experimental control

25 **Which of the following study designs best illustrates a scripted social interaction experiment?**

(A) The participant first views a highly amusing video and completes a spatial rotation task. They then view a sad video and complete the spatial rotation task again.

(B) The participant is instructed to walk down the hall to begin the experiment, and while they are walking a confederate bumps into them and makes a rude comment. The participant's arousal level is then measured

(C) The participant is asked to keep a diary account of their everyday conversations for two weeks and report on how their daily

Answer:
(B) The participant is instructed to walk down the hall to begin the experiment, and while they are walking a confederate bumps into them and makes a rude comment. The participant's arousal level is then measured

Feedback: Choice B is based on the famous Cohen et al. (1996) study on the culture of honor and aggression

interactions make them feel

(D) The experimenter uses a script to instruct the participants on how to make a series of facial expressions, then measures how the participant's blood pressure and heart rate changes as a result of the posed expression

26

Brock and Becker (1966), and subsequently other researchers, conducted studies in which an apparatus the participant is using is rigged to break. What emotion were they trying to induce?

(A) Anger

(B) Surprise

(C) Smusement

(D) Guilt

Answer:
(D) Guilt

Feedback: This is an effective elicitor of guilt, especially when the experimenter gets upset upon seeing the broken apparatus

27

Which of the following is not a technique for studying naturally occurring emotions?

(A) Quasi-experimental design

(B) Field study

(C) Scripted social interaction

(D) Experience sampling method

Answer:
(C) Scripted social interaction

Feedback: While scripted social interactions can elicit realistic and strong affective states, they are not ""naturally occurring,"" but instead experimentally induced

28

The following hypothetical studies are designed to test the relationship between anger (versus happiness) and self-control. Which could be considered a quasi-experimental study?

(A) The researchers are stationed outside of a football stadium after a big game. They ask fans of both the winning and losing teams, who are expected to be feeling increased joy and anger, respectively, to choose between a healthy snack and potato chips.

(B) Participants come to the lab and are randomly assigned to the Angry or Happy condition. The Angry condition participants are instructed to clench their fists and jaws while they complete a Go-No Go task, which measures inhibitory control. The Happy participants are instructed to bounce playfully in their seats

Answer:
(A) The researchers are stationed outside of a football stadium after a big game. They ask fans of both the winning and losing teams, who are expected to be feeling increased joy and anger, respectively, to choose between a healthy snack and potato chips.

Feedback: B and C are true experiments due to random assignment, while D is correlational

during the Go-No Go task.

(C) Participants come to the lab and are asked to recall either happy or angry memories, depending on which condition they were assigned to. Afterwards they are asked to choose between a healthy snack and potato chips.

(D) For two weeks participants carry special smartphones that beep at random intervals throughout the day, prompting them to answer a few questions about their current emotions and the activities they are currently engaged in. The researchers are particularly interested in the emotions accompanying activities associated with low self-control, like binge-watching TV, drinking, and eating junk food

29

Which of the following methodologies is a correlational design?

(A) Experiment with random assignment

(B) Experience sampling method

(C) Scripted social interaction

(D) Emotion induction with memory recall

Answer:
(B) Experience sampling method

30

A researcher wants to measure subtle facial muscle contractions people make when perceiving emotional stimuli. The researcher needs to induce multiple emotions many times in each participant. Which emotion induction and measure combination would be best?

(A) Emotional memory recall and electroencephalography (EEG)

(B) Scripted social interactions and Facial Action Coding Scheme (FACS)

(C) Emotional picture viewing and electromyography (EMG)

(D) Emotional film viewing and skin conductance

Answer:
(C) Emotional picture viewing and electromyography (EMG)

Feedback:

EMG is best suited for small, subtle facial actions (versus FACS); something like picture viewing is ideal for a study design that requires a variety of emotions over multiple trials within subject, since they don't take long to view