

Scientific Foundations of Public Speaking

Public Speaking · Answer Key · 17 Questions

1. Which neurochemical is most significantly linked to the 'fight or flight' response experienced during public speaking anxiety, leading to physiological symptoms like increased heart rate and sweating?

- A) Dopamine
- B) Serotonin
- C) Cortisol**
- D) Oxytocin

2. According to cognitive load theory, effective public speaking should aim to minimize extraneous cognitive load. Which of the following is an example of a technique that *increases* extraneous load?

- A) Using clear, concise language
- B) Employing excessive jargon and complex sentence structures**
- C) Providing relevant visual aids
- D) Encouraging audience engagement through rhetorical questions

3. The Yerkes-Dodson Law, applied to performance under arousal, suggests that optimal performance in public speaking occurs at:

- A) Extremely low levels of arousal
- B) Moderately high levels of arousal**
- C) Extremely high levels of arousal
- D) Zero arousal

4. Which psychological phenomenon describes the tendency for an audience to pay more attention to and recall information presented by speakers they perceive as credible and authoritative, even if the information itself is not demonstrably superior?

- A) Confirmation bias
- B) The halo effect**
- C) Cognitive dissonance
- D) The fundamental attribution error

5. Research in nonverbal communication suggests that facial expressions of emotion are largely universal. Which researcher is most famously associated with the cross-cultural study of facial expressions and their link to innate emotional responses?

- A) Albert Mehrabian
- B) Paul Ekman**
- C) Ray Birdwhistell
- D) Edward T. Hall

6. The 'elaboration likelihood model' (ELM) of persuasion posits two routes to attitude change. In public speaking, which route is more likely to be activated when the audience is highly motivated and able to process the message deeply?

- A) The peripheral route
- B) The central route**
- C) The heuristic route
- D) The emotional route

7. Studies on memory and learning indicate that information is best retained when presented through multiple modalities. For a public speaker, this principle supports the use of:

- A) Purely auditory delivery
- B) Purely visual aids without verbal explanation
- C) A combination of verbal, visual, and possibly kinesthetic elements**
- D) Repetitive verbal statements without variation

8. The concept of 'primacy and recency' in memory recall suggests that audiences are most likely to remember information presented:

- A) Only in the middle of a presentation
- B) At the beginning and end of a presentation**
- C) Only at the beginning of a presentation
- D) Only at the end of a presentation

9. Neuroscience research on the 'amygdala' suggests its role in processing fear and threat. In public speaking, overactivation of the amygdala can lead to:

- A) Enhanced cognitive focus
- B) Increased creativity
- C) Heightened anxiety and avoidance behaviors**
- D) Improved speech fluency

10. The 'reciprocal nature' of communication, as described in communication theory, implies that in a public speaking context, the speaker's message is influenced by:

- A) Only the speaker's intentions
- B) The audience's feedback and reactions, even if non-verbal**
- C) External environmental factors alone
- D) Pre-determined scripts with no room for adaptation

11. According to the principles of behavioral psychology, 'desensitization' is a technique used to reduce anxiety. In public speaking, this can be achieved through:

- A) Avoiding speaking situations altogether
- B) Gradual and repeated exposure to speaking scenarios**
- C) Intensifying exposure to the most feared scenario immediately
- D) Focusing solely on internal self-talk without practice

12. The 'theory of planned behavior' suggests that an individual's intention to perform a behavior is influenced by their attitudes, subjective norms, and perceived behavioral control. For a public speaker, low 'perceived behavioral control' might manifest as:

- A) Overconfidence in their speaking ability
- B) Belief that they can't control external factors affecting their speech (e.g., technology failure)**
- C) High motivation to practice and prepare
- D) A strong belief in the importance of their message

13. Which aspect of Aristotle's rhetorical appeals (ethos, pathos, logos) is most directly related to the logical reasoning, evidence, and structure of a speaker's argument?

- A) Ethos
- B) Pathos
- C) Logos**
- D) Kairos

14. In terms of vocal delivery, the 'rate' of speech refers to:

- A) The volume of the voice
- B) The speed at which words are spoken**
- C) The pitch variation of the voice
- D) The clarity of articulation

15. The 'mere-exposure effect' suggests that repeated exposure to a stimulus can increase liking for that stimulus. Applied to public speaking, this means an audience may become more receptive to a speaker and their message:

- A) After a single, highly impactful presentation
- B) With consistent, positive exposure over time**
- C) Only if the message is novel and shocking
- D) If the speaker is introduced once with a strong disclaimer

16. The 'attentional blink' is a phenomenon in cognitive psychology where a person is unable to process a second target stimulus if it appears within a short interval after the first target. In public speaking, this implies that presenting too many complex ideas in rapid succession can lead to:

- A) Increased audience engagement
- B) Reduced information processing by the audience**
- C) Enhanced memory recall
- D) A stronger emotional connection

17. Which theory of leadership emphasizes the importance of a speaker's ability to inspire and motivate an audience through a compelling vision and strong personal connection, often referred to as 'transformational leadership'?

- A) Transactional Leadership Theory
- B) Contingency Theory
- C) Charismatic Leadership Theory**
- D) Servant Leadership Theory