

Pre-Survey: Background and Expectations for an AI Learning Assistant

Section 1: Instructions to Participants:

We are conducting a short pre-survey as part of a Human–AI Interaction study. The aim of this survey is to understand participants' background, prior experience with AI-based learning tools, and general preferences regarding learning support.

Your responses will be used to inform the design of an AI learning assistant and to establish baseline measures before the main study.

The survey takes approximately 5-6 minutes, is anonymous, and all responses will be used for academic purposes only.

Thank you for your participation!

Section 2: Consent

1. User ID *
(Auto-filled by system. Please do not edit this field.)
2. Do you agree to take part in this study? *
 - ☐ Yes
 - ☐ No

Section 3: Background Information

3. What is your age? *
short answer text
4. What is your gender? *
 - ☐ Woman
 - ☐ Man
 - ☐ Non-binary
 - ☐ Prefer not to disclose
5. What is your field of study or educational background? *
short answer text
6. Have you ever used an AI tool (e.g., ChatGPT, Duolingo, etc.) for learning? *
 - ☐ Yes

☐ No

7. If yes, which AI tool(s) have you used for learning?
short answer text

Section 4: Baseline Knowledge (Pre-Test)

The following questions assess your general knowledge related to the learning topics. Please answer based on your current understanding.

Classical Conditioning

8. In classical conditioning, what becomes the conditioned stimulus? *
- ☐ The stimulus that naturally triggers a response
 - ☐ The stimulus that is repeatedly paired with another stimulus and later triggers a response
 - ☐ The learned response after conditioning
 - ☐ The behavior that follows reinforcement

Memory Types (Short-term vs Long-term)

9. Which type of memory stores information for a short period of time, usually seconds to minutes? *
- ☐ Long-term memory
 - ☐ Short-term memory
 - ☐ Episodic memory
 - ☐ Sensory memory
10. Which of the following is an example of long-term memory? *
- ☐ Remembering a phone number just long enough to dial it
 - ☐ Remembering what you ate for breakfast today
 - ☐ Remembering the name of your elementary school
 - ☐ Remembering a word you just heard a second ago

Cognitive Biases (Confirmation Bias)

11. What best describes confirmation bias? *
- ☐ Judging the likelihood of events based on recent examples
 - ☐ Remembering information more accurately over time
 - ☐ Seeking and interpreting information that confirms existing beliefs
 - ☐ Changing beliefs when new evidence appears
12. Which situation is an example of confirmation bias? *

- ☐ A person changes their opinion after reading opposing evidence
- ☐ A person only reads news articles that support their existing views
- ☐ A person forgets information over time
- ☐ A person learns through trial and error

Section 5: Learning Preferences

Scale for the following questions: Likert-Scale (1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly agree)

- 13. I prefer an AI tutor that gives emotional encouragement while learning. *
- 14. I prefer an AI tutor that gives calm and neutral explanations. *
- 15. I feel more motivated when feedback is supportive. *
- 16. I feel more motivated when feedback is clear and direct. *

Section 6: General Communication Style Preference

- 17. Which general communication style feels most comfortable for you when learning? *
 - ☐ Friendly and positive
 - ☐ Calm and steady
 - ☐ Professional and direct

Section 7: Open-ended Questions

- 18. In your own words: What should an empathetic AI tutor sound like? *
- 19. In your own words: What should a neutral/direct AI tutor sound like? *

Section 8: Confidence in Learning with AI (Optional)

- 20. I feel confident about learning new topics with the help of an AI tutor.

Likert-Scale (1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly agree)