

# Let Me Finish First - The Effect of Interruption-Handling Strategy on the Perceived Personality of a Social Agent

## SUPPLEMENTARY MATERIAL

### The Character



Figure 1: A rendering of the character that was interviewed by participants during the interaction. All three characters looked identical, but their background varied slightly to indicate that they are not talking to exactly the same character in each round.

## Perceptual Measures

If not indicated otherwise, all questions were presented to participants in the same order as listed below.

### Part 1: The Interaction

What is your perception of the conversation you had with the last character?

1. It was easy to gather information from the character.
2. In the end, I felt satisfied with the number of information items we gathered from the character.
3. I enjoyed having a conversation with the character

All items were judged on a 5-point Likert scale ranging from *Totally Disagree* to *Totally Agree*.

### Part 2: The Character

If you think about the character that you just interacted with, how would you describe the character on the following scales?

1. Lifelikeness [Artificial - Lifelike]
2. Naturalness [Fake - Natural]
3. Likeability [Dislike - Like]
4. Friendliness [Unfriendly - Friendly]
5. Pleasance [Unpleasant - Pleasant]

All items were judged on a 5-point Likert scale with the range indicated in the bracket. The scales are based on the Godspeed questionnaire [Bartneck et al.(2009)].

I see the character as...

1. Calm, emotionally stable
2. Open to new experiences, complex
3. Extraverted, enthusiastic
4. Critical, quarrelsome
5. Reserved, quiet
6. Disorganized, careless
7. Dependable, self-disciplined
8. Anxious, easily upset
9. Conventional, uncreative
10. Sympathetic, warm

This is the full Ten-Item Personality Inventory (TIPI) questionnaire developed by [Gosling et al.(2003)]. Each item is judged on a 7-point Likert scale ranging from *Disagree Strongly* to *Agree Strongly*. The order of the TIPI questions was presented in random order.

### Part 3: Communicative Abilities

How would you rate the communicative ability of the virtual character on the following dimensions?

1. Competence [Incompetent - Competent]
2. Directness [Meandering - Direct]
3. Efficiency [Inefficient - Efficient]
4. Cooperation [Uncooperative - Cooperative]

These questions are based on the work by [Doyle et al.(2021)]. All items were judged on a 7-point Likert scale with the range indicated in the bracket.

#### Conversational Dynamics

1. I talked to the character in the way I normally talk to another person
2. Sometimes, the character had awkward pauses which made us lose time
3. The character wouldn't let me get a word in
4. The speed and flow of communicating with the character was good
5. In order to perform as well as I could, the character and I were talking at the same time
6. I felt the character was attentive

The final set of questions was adapted from [Paetzel et al.(2015)]. All items were judged on a 5-point Likert scale ranging from *Totally Disagree* to *Totally Agree*. They were presented in random order.

## Bridge Lines - Acknowledge Condition

Below is the list of lines used in ACKN condition when the user attempted to interrupt the agent during its turn:

1. I need to finish what I'm saying
2. Let me finish first
3. Hold on...I'll get back
4. I'd like to finish my point first
5. Hold on, let me finish first
6. I need to finish my point
7. Let me get through this part
8. I need to finish what I'm saying first
9. I want to get through my whole point
10. I prefer to finish before we discuss
11. I'll tell you in a second
12. Let me wrap up, then I'll reply
13. Replies after I conclude
14. I'll return to that later
15. Wait till I finish, then I'll respond
16. I'll finish first, then I respond
17. I'll come back to it in a bit
18. Response after I finish
19. I'll talk, then respond
20. Let me finish, then I'll reply

## References

- [Bartneck et al.(2009)] C. Bartneck, D. Kulić, E. Croft, and S. Zoghbi. 2009. Measurement instruments for the anthropomorphism, animacy, likeability, perceived intelligence, and perceived safety of robots. *International journal of social robotics* 1 (2009), 71–81.
- [Doyle et al.(2021)] P. R. Doyle, L. Clark, and B. R. Cowan. 2021. What Do We See in Them? Identifying Dimensions of Partner Models for Speech Interfaces Using a Psycholexic Approach. In *Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems* (Yokohama, Japan) (*CHI '21*). Association for Computing Machinery, New York, NY, USA, Article 244, 14 pages. <https://doi.org/10.1145/3411764.3445206>
- [Gosling et al.(2003)] S. D. Gosling, P. J. Rentfrow, and W. B. Swann Jr. 2003. A very brief measure of the Big-Five personality domains. *Journal of Research in personality* 37, 6 (2003), 504–528.
- [Paetzel et al.(2015)] M. Paetzel, R. Manuvinaurike, and D. DeVault. 2015. “So, which one is it?” The effect of alternative incremental architectures in a high-performance game-playing agent. In *Proceedings of the 16th Annual Meeting of the Special Interest Group on Discourse and Dialogue*. 77–86.