The effect of textual anthropomorphism in conversational agents

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1. Background

- Anthropomorphism is how humanlike the Conversational Agent is.

- Different levels of anthropomorphism in Conversational Agents can improve the satisfaction of users, but can cause an uncanny feeling.

- This research will look into what textual aspects would improve the satisfaction.

2. Research Question:

To what extent can a conversational agent with different levels of anthropomorphism improve the satisfaction and engagement of the user?

RQ1: What impact does adding typos and a delay to a conversational agent has in terms of satisfaction and engagement of the user?

RQ2: What impact does adding empathy to a conversational agent has in terms of satisfaction and engagement of the user?

3. Methodology

- 1 conversational agent for each subquestion

- 1 conversational agent as control group

- Participant has a conversation with a chatbot using Telegram

- Participant answers a survey

- Results of the surveys are compared to the results of the control group

RQ1   control   RQ2

4. Results:

- Based on survey no significant improvement in satisfaction and engagement when adding typos and delay.

- Based on the survey also no significant improvement when adding empathy.

- However, multiple participants complaint that they felt ignored when testing a conversational agent without empathy.

5. Conclusion:

- Typos and delay show no significant improvement in both engagement and satisfaction.

- Empathy has a positive effect on a conversation with a conversational agent.

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