

APPENDIX B: Trust in AI / Automation Questionnaires

This document provides examples of questionnaires for measuring trust in AI and automation. They vary in context , number of items, and rating scale.

Hoffman et al's (2023) "the Trust Scale for the AI Context" (TAI)

Each item is rated by a 5-point Likert scale: 1: I agree strongly, 2: I agree somewhat, 3: I'm neutral to it, 4: I disagree somewhat, 5: I disagree strongly.

1. I am confident in the [tool]. I feel that it works well.
2. The outputs of the [tool] are very predictable.
3. The [tool] is very reliable. I can count on it to be correct all the time.
4. I feel safe when I rely on the [tool]. I will get the right answers.
5. The [tool] is efficient that it works very quickly.
6. I am wary of the [tool]. (R)
7. The [tool] can perform the task better than a novice human user.
8. I like using the system for decision making.

Hoffman, R. R., Mueller, S. T., Klein, G., & Litman, J. (2023). Measures for explainable AI: Explanation goodness, user satisfaction, mental models, curiosity, trust, and human-AI performance. *Frontiers in Computer Science*, 5, 1096257.

Trust in Automation Questionnaire:

https://github.com/moritzkoerber/TiA_Trust_in_Automation_Questionnaire/blob/master/Trust-in-Automation_TiA_questionnaire.pdf

		Strongly disagree	Rather disagree	Neither disagree nor agree	Rather agree	Strongly agree	No response
1	The system is capable of interpreting situations correctly.	(1)	(2)	(3)	(4)	(5)	○
2	The system state was always clear to me.	(1)	(2)	(3)	(4)	(5)	○
3	I already know similar systems.	(1)	(2)	(3)	(4)	(5)	○
4	The developers are trustworthy.	(1)	(2)	(3)	(4)	(5)	○
5	One should be careful with unfamiliar automated systems.	(1)	(2)	(3)	(4)	(5)	○
6	The system works reliably.	(1)	(2)	(3)	(4)	(5)	○
7	The system reacts unpredictably.	(1)	(2)	(3)	(4)	(5)	○
8	The developers take my well-being seriously.	(1)	(2)	(3)	(4)	(5)	○
9	I trust the system.	(1)	(2)	(3)	(4)	(5)	○
10	A system malfunction is likely.	(1)	(2)	(3)	(4)	(5)	○
11	I was able to understand why things happened.	(1)	(2)	(3)	(4)	(5)	○
12	I rather trust a system than I mistrust it.	(1)	(2)	(3)	(4)	(5)	○
13	The system is capable of taking over complicated tasks.	(1)	(2)	(3)	(4)	(5)	○
14	I can rely on the system.	(1)	(2)	(3)	(4)	(5)	○
15	The system might make sporadic errors.	(1)	(2)	(3)	(4)	(5)	○
16	It is difficult to identify what the system will do next.	(1)	(2)	(3)	(4)	(5)	○
17	I have already used similar systems.	(1)	(2)	(3)	(4)	(5)	○
18	Automated systems generally work well.	(1)	(2)	(3)	(4)	(5)	○
19	I am confident about the system's capabilities.	(1)	(2)	(3)	(4)	(5)	○