

INSTRUCTIONS FOR USING THE PTT SCALES

as presented in the article

“Measuring the Propensity to Trust in Automated Technology: Examining Similarities to Dispositional Trust in Other Humans and Validation of the PTT-A Scale.”

by D. Scholz*, J. Kraus*, & L. Miller

* These authors contributed in equal measures to this work

General instructions for the PTT scales:

On the following page the final scales (14 items) and short scales (6 items) for both the propensity to trust in automated technological systems (PTT-A) and other humans (PTT-H) can be found (see also “ItemsFinalScales.xlsx” in the OSF).

The items should be presented in a randomized order. Please note that some of the items are negatively poled (see the respective column in the excel file). In the present study, we used a five-point Likert-type scale ranging from 1 (“strongly disagree”) to 5 (“strongly agree”).

For the PTT-A scales, we used the following instruction:

Now we are interested in your opinions about automated technology – i.e., **technology that can perform certain functions automatically** without any input from you.

Automated technology is taking on more and more tasks in various areas of life. For example, robots are becoming more widely used in industry and in private households. Many means of transport (airplanes, trains, or cars) are also now increasingly automated.

The term automated technology includes (among other things):

- Automated means of transport (e.g. autonomous cars, trains, streetcars, airplanes)
- Industrial robots (e.g. assembly robots, automated logistics robots)
- Service and assistance robots (e.g. robot vacuum cleaners, robot lawn mowers, healthcare robots)
- Other programs and systems based on artificial intelligence (e.g. language assistants, image recognition)

There are a number of statements on the next pages about automated technology in general that may apply to you more or less. Please respond to each of these statements by indicating the extent to which you agree or disagree with the statement, i.e. how much it applies to you. There are five options available, ranging from “strongly disagree” to “strongly agree”.

For the PTT-H scale, we used the following instruction:

There are a number of statements on the next pages about people in general that may apply to you more or less. Please respond to each of these statements by indicating the extent to which you **agree or disagree** with the statement, i.e. how much it applies to you. There are five options available, ranging from “strongly disagree” to “strongly agree”.

Instructions for the item pool

“ItemPool.xlsx” (see OSF) shows all PTT items which were presented to the participants during the study. From these items the final and short scales were devolved as described in the manuscript. The item pool can further serve as a starting point for the devolvment of other PTT scales. Please feel free to contact us, if you are interested in a collaboration.

THE PTT SCALES

	Facet	#	Items	R
Human	Trusting Stance	1	Even though I may sometimes suffer the consequences of trusting other people, I still prefer to trust than not to trust them.	
		2	I feel good about trusting other people.	
		3	I believe that I am generally better off when I do not trust other people than when I trust them.	R
		4	I rarely trust other people because I can't handle the uncertainty.	R
	Competence	5	Other people are competent.	
		6	Other people have sound knowledge about problems which they are working on.	
		7	I am wary about other people's capabilities.	R
	Benevolence	8	Other people do not have the capabilities that could help me reach my goals.	R
		9	I believe that other people have good intentions.	
		10	I feel that other people are out to get as much as they can for themselves.	R
		11	I don't expect that people are willing to assist and support other people.	R
	Integrity	12	Most other people are honest.	
		13	I feel that other people can be relied upon to do what they say they will do.	
		14	One cannot expect to be treated fairly by other people.	R
Automated Technology	Trusting Stance	1	Even though I may sometimes suffer the consequences of trusting automated technological systems, I still prefer to trust than not to trust them.	
		2	I feel good about trusting automated technological systems.	
		3	I believe that I am generally better off when I do not trust automated technological systems than when I trust them.	R
		4	I rarely trust automated technological systems because I can't handle the uncertainty.	R
	Competence	5	Automated technological systems are competent.	
		6	Automated technological systems have sound knowledge about problems for which they are intended.	
		7	I am wary about the capabilities of automated technological systems.	R
	Benevolence	8	Automated technological systems do not have the capabilities that could help me reach my goals.	R
		9	I believe that automated technological systems have good intentions.	
		10	I feel that automated technological systems are out to get as much as they can for themselves.	R
		11	I don't expect that automated technological systems are willing to assist and support people.	R
	Integrity	12	Most automated technological systems are honest.	
		13	I feel that automated technological systems can be relied upon to do what they say they will do.	
		14	One cannot expect to be treated fairly by automated technological systems.	R

Note. Items included in the 6-items short scales are printed in bold. R = reversed item.