

VALUES

AI and values

Do people’s long-term values shape their attitudes toward AI? Do these values influence how they use AI applications such as ChatGPT?

Sandra Kero, Sarah Yasemin Akyürek and Florian Golo Flaßhoff

Method:

Online survey

Executing institute:

infas quo

Base population:

German population aged 18 and older who use the Internet at least occasionally

Sample:

Weighted random sample (N=1,025)

Weighting criteria:

Age, gender and region (federal state)

Survey period:

2023/calendar week 11

Additional information:

[Detailed methodology overview](#) for the MeMo:KI project

Long-term values play a key role in how people assess new phenomena, as well as strongly influencing their decision-making and behavior. This also applies to attitudes toward new technologies. But little research has been done so far on how specific values influence people’s acceptance of and willingness to use artificial intelligence (AI). This is the gap that we in the Opinion Monitor Artificial Intelligence [MeMo:KI] would like to address by way of a representative survey (N=1,025). The questions that we ask are: Are there differences in values between people who endorse AI and those who reject it? Is there a correlation between values and the use of AI applications, such as the ChatGPT language model? Our results suggest that there are indeed significant differences: people who, for example, consider personal achievement and prestige, as well as new challenges and enjoyment, to be important goals in life are positive toward AI, while those who prioritize tradition, norms and routines tend to reject it.

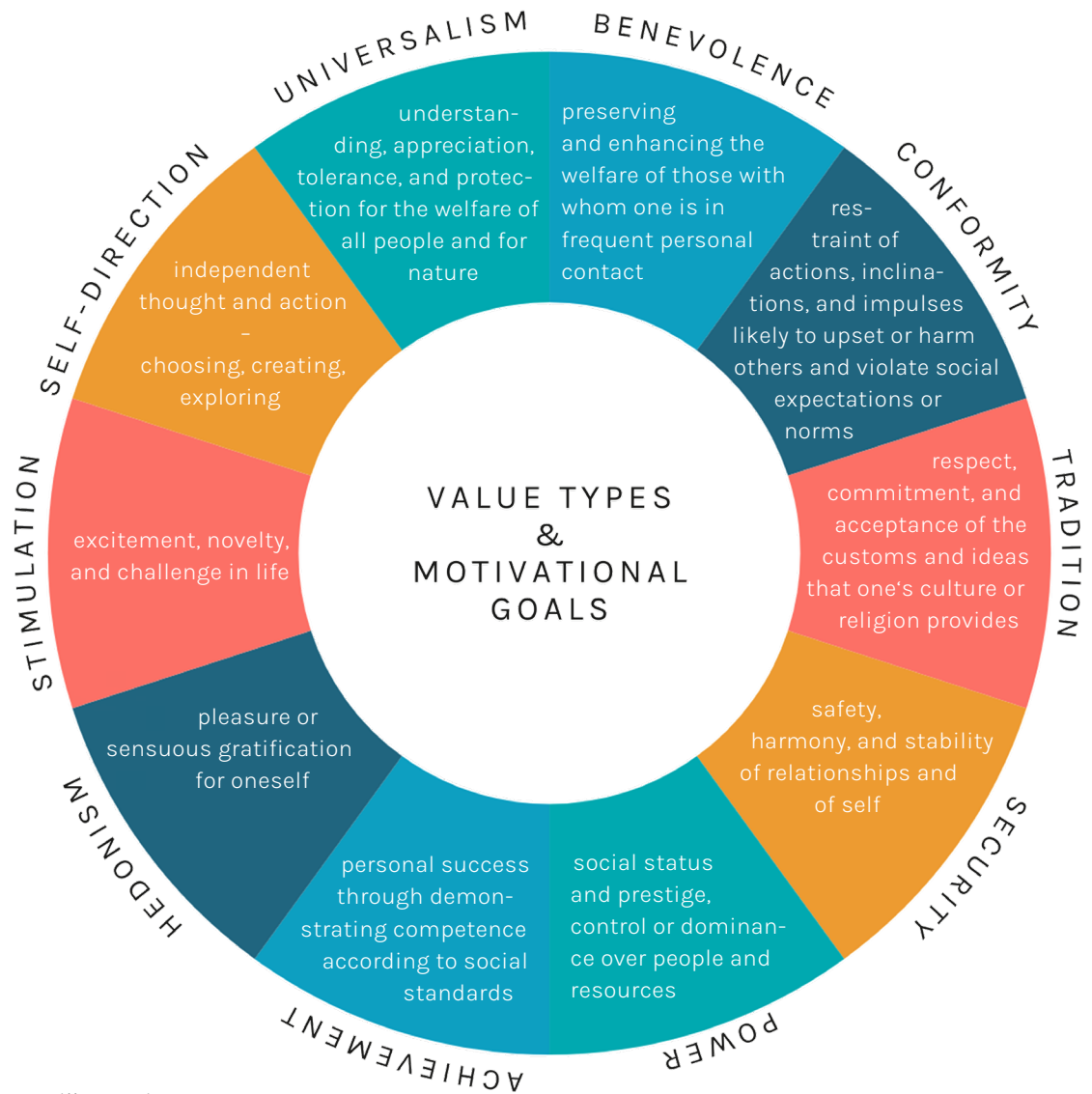
Background

In order to understand the diversity of human behaviour better, research in the social sciences often looks at people’s values. This helps identify different values and principles, which in turn can influence specific actions, decisions and attitudes with regard to various issues in people’s lives (Hitlin & Piliavin, 2004; Ro-keach, 1973). Shalom Schwartz, founder of the theory of basic human values, defines values as “desirable, transsituational goals, varying in importance, that serve as guiding principles in the life of a person or other social entity” (Schwartz, 1994). According to this theory, values are deeply rooted beliefs that are inherent to all people in different forms across cultures, and serve as fundamental principles to guide individual behaviour (Schmidt et al., 2007).

Studies have already shown that long-term values shape people’s immediate attitudes toward technology (e.g. Golden, 2018). Nonet-

theless, little research has been done so far on the effects of these values on people’s acceptance of and willingness to use technology (Sunny et al., 2019). The launch of ChatGPT in November 2022 has led to greater public discussion of AI and has drawn attention to its advantages and disadvantages (Coeckelbergh & Gunkel, 2023). A range of attitudes toward AI are emerging, which brings to the fore the need for in-depth discussion about the impact and use of this technology. The Opinion Monitor Artificial Intelligence [MeMo:KI] explores the possible influence of different values, its representative survey of 1,025 people now being in a position to provide initial answers. There are two main questions: Do people who are positive toward AI have different values from those who reject it? Is there a link between the respective values and the use of AI applications, such as the ChatGPT language model?

Figure 1: Value types as defined according to Schwartz's theory of basic human values.



Own illustration, based on Schmidt et al., 2007.

VALUES

Factsheet No. 11 - February 2024

Meinungsmonitor Künstliche Intelligenz

“ People belonging to the value types ‘achievement’ and ‘stimulation’ have a notably high acceptance of AI.

Individual values

To provide a typology of values, we draw on a model proposed by Schwartz in 1992. This identifies ten superordinate value types based on specific individual values (Schmidt et al., 2007), these being what people strive for in their lives and consider to be important (see Fig. 1).

In order to find out whether the individual values might influence attitudes toward and use of AI, we first asked the participants in our study to assess themselves using various descriptions that represent the values outlined above. This enabled us to assign the respondents to certain value types. We then asked them about their acceptance and use of AI. Comparing the two answers allowed us to identify potential correlations between the value types identified on the one hand, and attitudes toward and use of AI on the other.

People who take risks and prioritize achievement endorse AI

Our results show that people belonging to the value types ‘achievement’ and ‘stimulation’ have a notably high acceptance of AI. This therefore applies to those who strive for recognition of their abilities, who enjoy taking on new challenges, and who look for variety in their lives. There are also striking differences in attitudes toward AI between those who prioritize enjoyment and fun in life (value type: hedonism), and those who give less priority to these goals (see Fig. 2). The former type are much more positive toward technology, one possible explanation being that they find the very use of technology to be a pleasant experience. Equally plausible is that people with hedonistic tendencies see AI as a way of making tasks easier and of delegating their own work, thereby creating more space and time for them to fulfil their personal needs and enjoy life.



VALUES

Factsheet No. 11 - February 2024

Meinungsmonitor Künstliche Intelligenz

Figure 2: Correlation between the value types and the acceptance of AI.

	High	Low
Self-direction	Positive toward AI	Negative toward AI
Stimulation	Positive toward AI	Negative toward AI
Hedonism	Positive toward AI	Negative toward AI
Achievement	Positive toward AI	Negative toward AI
Power	Positive toward AI	Negative toward AI
Tradition	Negative toward AI	Positive toward AI

N=1,025 respondents; figures in %; 2023/calendar week 11; population aged 18 and over.

In contrast, those people surveyed who give less priority in life to enjoyment and self-reward, as well as to personal achievement and success, tend to be negative toward AI. The same applies to individuals who see themselves as being risk-averse and who value routines and predictability in life. Similarly, those respondents that can be assigned to the 'traditional' value type are also critical toward AI, with those who describe themselves as reserved and modest being opposed to the use of AI. It seems obvious that a strong attachment to traditional customs and traditions should correlate with a fundamental scepticism toward new technologies.

Somewhat surprising is the finding that respondents who prioritize power and self-direction are much more positive toward AI than those who deem personal influence, creative activities and independent thinking to be less important. This correlation is surprising if we consider the function and use of AI: namely, AI applications are used, among other things, to help people in tasks, even to take on these tasks completely, and to act autonomously. At the same time, however, using AI could strengthen people's personal responsibility by perhaps giving them greater independence from other people.

ChatGPT users strive for enjoyment, new experiences and challenges in life

In order to identify potential differences with regard to the different values, we then asked our respondents about their use of ChatGPT.

“ ChatGPT users prioritize enjoyment and excitement in life; they like rewarding themselves and are open to new experiences and challenges in life.

This revealed significant differences between users and non-users. Like those who are positive toward AI, ChatGPT users prioritize enjoyment and excitement in life; they like rewarding themselves and are open to new experiences and challenges in life (value type: stimulation, hedonism). Those surveyed who do not use ChatGPT have higher rates of conformity than those who say that they do (see Fig. 3). The former are therefore people who are reluctant to violate norms and expectations, and who thus consciously restrict their own actions for the sake of social harmony. It is interesting to note that our results show fewer significant differences in values when it comes to the use of AI than to the general acceptance of AI. For example, there are no major differences between non-users and users when it comes to the role of tradition or self-direction. It is also worth stressing again at this point that, besides those endorsing AI, an important role in life is given to the value type 'power' among AI users, these citing among other things control or dominance over people and resources as important personal goals in life. On the one hand, this seems plausible if AI is seen as a helpful tool for achieving these goals. On the other, these connections are of particular interest given the frequently discussed issue of AI as an opaque 'black box', one where the decision-making processes and mode of operation in particular are described as difficult for humans to understand.

Figure 3: Correlation between value types and the use of ChatGPT.

	High	Low
Conformity	-	Non-users
Stimulation	Users	-
Hedonism	Users	-
Power	Users	-

N=1,025 respondents; figures in %; 2023/calendar week 11; population aged 18 and over.

Summary

Values are fundamental beliefs and goals that guide individuals in life, shaping their decisions, behavior and attitudes. This also applies to their acceptance and use of new technologies such as AI.

In this context, we asked the German population about individual values, as well as their acceptance and use of AI, our aim being to gauge whether there are differences in attitudes with regard to the influence of individual



VALUES

Factsheet No. 11 –
February 2024

Meinungsmonitor
Künstliche Intelligenz

values. Our results show that people who particularly prioritize achievement, power, self-definition, enjoyment, and challenges in life are very positive toward AI, while those who prioritize traditions, customs, habits, and routines in life tend to be negative.

It is also clear that the values of 'hedonism', 'power' and 'stimulation' are prioritized more not only by those who endorse AI, but also by those who use ChatGPT. Non-users, on the other hand, see themselves as belonging to the 'conformity' value type, meaning that they strongly reject violations of expectations and social norms.

Suggested citation

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