Dear participant,

it is important that we not only learn more about children's perception of the voice assistant or its effect on the children, but also about the parents' perspective.

At the next step we will ask you a couple of questions about yourself, your family, as well as your first impressions about the voice assistant (Alexa/Google).

It is possible that various members of your family would have different responses to some of these questions. Perhaps you would answer the question about your affinity for technology differently than your partner or your child(ren), so we ask you to respond to these questions with an approximate average for your entire household.

Here are some important notes with regards to data processing and security: when it comes to studies, your voluntarily given written consent according to DS-GVO (art. 6, paragraph 1a) serves as legal grounds for the processing of your personal data. These data will be anonymised and used exclusively for scientific research and can be made available to other researchers in an anonymised form. The data will be stored for at least 10 years after it has been analysed or at least 10 years after the publication of research about this study.

The data will be stored in an anonymised form and will not allow any identification of your person.

You can stop this survey any time without explanation of reasons.

When responding to the questions, please remember that there are no right or wrong answers here, as we are asking for your personal opinions. Please try to respond intuitively and as quickly as you can. Filling in this questionnaire will take about 10 minutes of your time.

Please click "Next" if you wish to participate in this study and are consenting to the described processing of your anonymised data.

Thank you very much in advance, Clara Strathmann, Sarah Schlüter, Prof. Dr. Nicole Krämer and Dr. Jessica Szczuka. SD15. Please put down the number of the device that the experimenter gave you (a number between 1-20)

SD14. In order to match all questionnaires throughout the course of this study to the corresponding families, we would ask you to create a personalised, yet anonymised code and write it down here. This code consists of the first two letters of your first name and the day (without month or year) on which you were born (e.g., JE13).

We would like to get to know you, as we will be guiding you through this study for quite some time. For this, we would like to ask you a couple of questions about you and your family. These questions will not appear in later questionnaires.

SD02. Please, specify your gender

- female
- male
- diverse

SD03. How old are you? Please specify your age in years.

SD04. Do you live together with a partner?

- yes
- no

SD06. How many children live in your household? Please specify the gender and age of your child(ren). You can select multiple options and leave the other fields empty.

SD08. What is the highest education you received?

If SD04 responded with "yes", show:

SD05. Please specify the gender of your partner.

- female
- male
- diverse

SD11. How old is your partner? Please specify the age of your partner in years.

SD09. What is the highest education your partner received?

Please estimate how much you agree with the following sentences regarding you and your family, using this five-point scale.

EF02. Now we would like to learn more about your family's relationship with electronic devices, e.g., computers, smartphones, TVs, but also devices such as navigational systems.

Members of my family know most of the functions of the electronic devices we own (to the extent they can understand them based on their age)

Compared to our social environment, we are more open to the use of electronic devices in everyday family life

NU05. How many devices that could be considered "smart" are integrated in your household? (e.g., robot vacuums, robot lawn mowers, automated lighting systems, smart fridge)

NU10. How many times a day do you expect yourself to use the voice assistant? Please, estimate an average number. (If you think the number will be smaller than once a day, please specify a value between 0 and 1, for instance, 0.25 times meaning once every four days.)

NU11. How many times a day do you expect your child(ren) to use the voice assistant? Please, estimate an average number. (If you think the number will be smaller than once a day, please specify a value between 0 and 1, for instance, 0.25 times meaning once every four days.)

EF05. Now we are interested in your motivation to procure a voice assistant. Why did you decide to participate in the study and try out the voice assistant?

Strongly	Disagree	Undecided	Agree	Strongly
disagree				agree

Facilitation of everyday activities

Curiosity about the new technology

Some people in our social circle already possess voice assistants

Desire to support scientific research

Desire to see whether a voice assistant will be of use to the household long-term

NU08. How much fun did you have during the first interactions with the voice assistant?

None at all	Little	Moderately	Quite a bit	A lot
		,, ,		

NU09. How much fun did your children have during the first interactions with the voice assistant?

	None at all	Little	Moderately	Quite a bit	A lot
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KO01. Now, we would like to ask you whether you expect yourself or your children to adopt the speaking style of the voice assistant in everyday life.

Please estimate how much you agree with the following sentences using this five-point scale.

Strongly	Disagree	Undecided	Agree	Strongly
disagree				agree

I can imagine that I will adopt some features of the speaking style of the voice assistant in my everyday life. (Meaning the transfer of language that you've learnt directly from the voice assistant.) I can imagine that my child(ren) will adopt some features of the speaking style of the voice assistant in my everyday life. (Meaning the transfer of language that your child(ren) learnt directly from the voice assistant.)

KO07. Here we would like to ask you more about the expectations you have for the voice assistant.

	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
communication ken to more					

I can imagine that there will be less communication with me if the voice assistant is spoken to more frequently.

Having a voice assistant may lead to more conversations within a family (for example, if it prompts conversations within the family)

KO04. It is important for you to have educational conversations with your child(ren) about the voice assistant

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
		· · · · · · · · · · · · · · · · · · ·		

ZH05. What was your first impression?

How satisfied were you with...

Very dissatisfied	Dissatisfied	Neither dissatisfied	Satisfied	Very satisfied
		nor satisfied		

...with the level of understanding of the voice assistant (how well your speech was understood)?

...with the speech output (words, intonation) of the voice assistant?

BW07. Please estimate how much you agree with the following sentences.

Not at all Rather not Undecided Rather yes Very much

How masculine is the voice assistant in your opinion?

How feminine is the voice assistant in your opinion?

The voice assistant is dominant.

The voice assistant is cheerful.

BW08. Please rate the expertise of the voice assistant in following topics. (5-point scale)

	No expertise	Moderate expertise	A lot of expertise
Languages			
Geography			
Weather			
Technology			

Bringing up children

Repairs Cooking/recipes Sports Caring for the sick Cars & motorcycles Housekeeping Biology

BW01. Please specify how much you agree with the following statements based on your first impression of the voice assistant.

Strongly	Disagree	Undecided	Agree	Strongly
disagree				agree

The voice assistant can be happy.

The voice assistant can be friendly.

The voice assistant can be respectful.

The voice assistant can be funny.

The voice assistant can be caring.

The voice assistant is capable of speaking like a human.

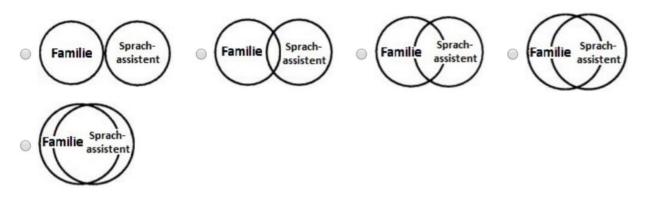
BW06. Please specify how much you agree with the following statements about your cohabitation with the voice assistant.

agree

BW03. Select a picture that depicts your expectations with regards to how strongly the voice assistant will be integrated into your family.

("family" is to the left and "voice assistant" to the right)

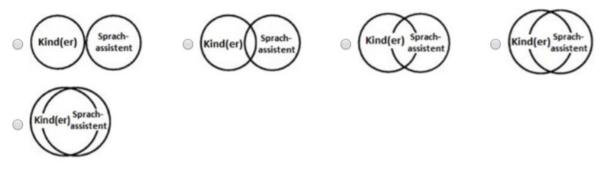
Geben Sie anhand der Grafik an, wie stark Sie erwarten, dass der Sprachassistent in die Familie integriert wird.



BW05. Select a picture that depicts your thoughts on how the relationship between your child(ren) and the voice assistant might develop.

("child(ren)" on the left and "voice assistant" on the right)

Bitte geben Sie anhand der Grafik an, wie eng Sie sich die Beziehung zwischen Ihrem Kind/Ihren Kindern und dem Sprachassistenten vorstellen können.



BW02.

Not at all A little Moderate Quite a bit A lot

Can you imagine being sad when the voice assistant will be gone?

Can you imagine your child(ren) being sad when the voice assistant will be gone?

EF03. The following sentences concern the general value you place on the protection of your personal privacy. Please specify how much you agree with these statements.

Strongly	Disagree	Undecided	Agree	Strongly
disagree				agree

Privacy is important and worthy of protection.

Every person should have an opportunity to decide what data about them is publicly available.

Privacy is not important in our society anymore.

The privacy of a person can be violated if it creates greater value for the entire society.

The disclosure of personal information is no problem for me.

Someone who has nothing to hide should not be worried about privacy.

Sometimes I feel helpless when it comes to the protection of my privacy.

I resigned myself to the fact that my personal data will be stored and divulged to other parties.

TV01. The following questions concern your thoughts and the thoughts of your family on data processing of the voice assistant. The system often asks for access to certain types of data for the usage of a particular service. Would you give the voice assistant access to following types of data? (5-point scale)

	Never		Reluctantly		Without hesitation
Location					
Bank account data					
Income					
Data related to a sickness (for example, body temperature to receive a diagnosis)					
Ethnicity					
Religion					
Political views					
Sexual orientation					
Information about your job position					
Information about an illegal act					
Information about acts that violate social norms					
TV03. Now we would like to ask you how you feel abou assistant	t the prote	ection of	of privacy	by the v	voice
	Never	Rarely	Sometimes	Often	Very often
I have concerns that we are eavesdropped on without our consent.					
I worry that our device can be hacked/manipulated by a third party.					
I do not like that our voices are being recorded.					
TV06. Please specify with the help of this slider whether independent entity or as software controlled/programmed	•			t as an	

Independent/autonomously	Software
acting entity	controlled/programmed by an
	organisation

TV08. Now we would like to know what your opinion is on the organisations behind voice assistants (Google, Amazon, Apple, etc.). Please specify how much you agree with the following statements.

Strongly	Disagree	Undecided	Agree	Strongly
disagree				agree

I can trust people and organisations that are concerned with the development of voice assistants.

People and organisations concerned with the development of voice assistants have good intentions.

People and organisations concerned with the development of voice assistants will respect the needs, thoughts and feelings of their users.

Thank you very much for participating!

Your responses have been recorded. You can now close the tab of the browser and wait until the experimenter comes back to get you, so you could proceed to the interaction with your child(ren).

Clara Strathmann, Sarah Schlüter, Dr. Jessica Szczuka and Prof. Dr. Nicole Krämer, University of Duisburg-Essen – 2019