

Supplementary material

Questionnaires

Round 1

Do you identify as

- male
- female
- other
- prefer not to say

How old are you? (in years)

What is your country of origin ?

Which country do you live in now?

What is your level of reading English?

- Excellent (English is my first language)
- Very good (English is my second language)
- Good (I have understood everything in this questionnaire so far)
- Elementary (I have understood most of this questionnaire so far)
- Limited (I have not understood most things in this questionnaire so far)

Do you have a formal clinical diagnosis (i.e. from a qualified health professional) of an autism spectrum disorder (ASD, or autism, or Asperger Syndrome)?

Yes

No

Display This Question:

If Do you have a formal clinical diagnosis (i.e. from a qualified health professional) of an autism... = Yes

At what age approximately (in years) did you get your diagnosis?

Do you have an immediate family member (a child, a parent, a brother or sister) with a formal clinical diagnosis (i.e. from a qualified health professional) of an autism spectrum disorder (ASD, or autism, or Asperger Syndrome)?

Yes

No

Display This Question:

If Do you have an immediate family member (a child, a parent, a brother or sister) with a formal cli... = Yes

You said you have an immediate family member with a formal clinical diagnosis of an autism spectrum disorder. Please specify.

Are you a professional / practitioner (such as someone in a school, or health service, for example) who works with autistic people?

Yes

No

Display This Question:

If Are you a professional / practitioner (such as someone in a school, or health service, for exampl... = Yes

You said you are a professional / practitioner who works with autistic people. Please specify.

How often are you searching for digital technology for an autistic user (or for yourself, if you are autistic)?

- daily
- 2-3 times per week
- weekly
- 2-3 times per month
- monthly
- less than once a month

Open questions

We will ask you some questions about digital technology for autistic people (that is any piece of hardware or software). When answering those questions, please think about recent experiences when choosing or recommending a piece of technology intended for an autistic person (could be yourself).

What was your goal(s) for this piece(s) of technology? For example, it was for fun or leisure (e.g. gaming) or learning or school support (e.g. to help learn mathematics) or as an intervention (e.g. to develop communication skills)? These are just examples. Please try and be specific when you describe each goal.

Think about the goal(s) in the question above, did this technology (or technologies) help achieve your goal(s)? How do you know?

For example “it was fun as he kept playing it and smiling”, or “it didn’t help with learning mathematics as her school marks didn’t change”, or “it did support my communication skills as my requests are now more easily understood”. These are just examples.

Next time you want to buy a similar piece of technology, what will you look for?
What information or features would increase your confidence that the technology (or technologies) would help achieve your goal?

If you recommended a piece of technology to someone else, what would you say to inform them that it was good?
How would you support/justify your opinion?

For the following areas: 1) leisure 2) educational support 3) intervention and 4) independent living, imagine that you have access to all the following sources of information.
Which one(s) would help you evaluate the potential effectiveness of a product?
Select all that apply.

1) Leisure (e.g. games) Select all that apply

- Recommendation from a friend / colleague
- Recommendation from a professional / expert / clinician
- Recommendation from traditional media (e.g. in TV news or magazine articles)
- Recommendations from online forums
- Number of stars on App Store / Amazon
- Information on product websites
- Summaries of research studies (e.g. abstracts on google scholar, summaries in professional magazines)
- Full research studies (e.g. as published in a research journal)
- Other (please specify) _____
- I wouldn't look for information about effectiveness

2) Educational support (e.g. mathematics) Select all that apply

- Recommendation from a friend / colleague
- Recommendation from a professional / expert / clinician
- Recommendation from traditional media (e.g. in TV news or magazine articles)
- Recommendations from online forums
- Number of stars on App Store / Amazon
- Information on product websites
- Summaries of research studies (e.g. abstracts on google scholar, summaries in professional magazines).

- Full research studies (e.g. as published in a research journal)
- Other (please specify) _____
- I wouldn't look for information about effectiveness

3) Interventions (e.g. to develop communication skills) Select all that apply.

- Recommendation from a friend / colleague
- Recommendation from a professional / expert / clinician
- Recommendation from traditional media (e.g. in TV news or magazine articles)
- Recommendations from online forums
- Number of stars on App Store / Amazon
- Information on product websites
- Summaries of research studies (e.g. abstracts on google scholar, summaries in professional magazines).
- Full research studies (e.g. as published in a research journal)
- Other (please specify) _____
- I wouldn't look for information about effectiveness

4) Independent living (e.g. planning your day) Select all that apply

- Recommendation from a friend / colleague
- Recommendation from a professional / expert / clinician
- Recommendation from traditional media (e.g. in TV news or magazine articles)
- Recommendations from online forums
- Number of stars on App Store / Amazon
- Information on product websites
- Summaries of research studies (e.g. abstracts on google scholar, summaries in professional magazines).
- Full research studies (e.g. as published in a research journal)
- Other (please specify) _____
- I wouldn't look for information about effectiveness

Imagine you have all resources you need (money, appropriate platform etc). Below are four types of products. Which source of information would increase your confidence in each product? Please select only one.

Pictogram communication support app

- scientific paper
- speech pathologists' association booklet
- positive review on a parenting website
- 4+ Amazon stars

Maths training software

- Product's website information
- teacher recommendation on social networks
- The website of the ministry of education
- Scientific paper

Face emotion recognition software

- Recommendation on the website of a psychology association
- Scientific paper
- Product's website information
- Recommendation by an educational psychologist on TV

Sensory device for relaxation

- Product's website information
- Recommendation on autism forum
- Scientific paper
- Recommendation on the website of a psychology association

Is there anything else you would like to add?

Round 2

Do you have any conflict of interest related to this study to declare?

A conflict of interest exists when judgement concerning a primary interest (in this case, an autism practice) may be influenced by a secondary interest (such as financial gain or personal rivalry). We therefore ask you to disclose any such potential conflict of interest.

Examples might include:

- Financial associations with companies that market technologies that may be used by autistic people.
- Non-financial associations with specific technologies such as having been involved in their design or development.

If you're not sure, it's best to select "Yes" and give us the details. Having a conflict of interest won't mean you are removed from the study. It's just useful contextual information for us.

Yes

No

Display This Question:

If Do you have any conflict of interest related to this study to declare?A conflict of interest exis... = Yes

You said you have a potential conflict of interest related to this study. Please specify

Are you a professional / practitioner (in a school or health service, for example) who works with autistic people?

If you select "Yes", we'll ask for a little bit more detail on your professional experience. You can be a part of this study if you are in multiple categories - e.g. an autistic person who is also a professional. So selecting "Yes" will not mean you will not also be asked about your other experiences with autism.

Yes

No

Think about the autistic people you have been working with in the past few years.

What is the age range of the autistic people you are working with? Select all that apply.

- Pre-schoolers (3-5)
- Young children (6-9)
- Older children (9-12)
- Adolescents (12-18)
- Young adults (18-25)
- Adults (25-60)
- Older adults (60+)

Do some of the autistic people you are working with have intellectual disabilities?

- Yes
- No

Do the autistic people you are working with have any of the following clinical diagnoses? Tick all that apply.

- ADHD
- Dyspraxia
- Epilepsy
- Other (please state) _____
- None

Is there a specific topic (e.g. communication support) or autistic population (e.g. autistic women) you have a particular interest in? If that is the case, please explain briefly.

Approximately how long have you worked with autistic people?

0 2 4 6 8 10 or more

Years	
-------	------------------------------------------------------------------------------------

Have you received any training about using technology with autistic people? If so, was it formal or informal? Please explain briefly.

Do you have any immediate family member (a child, a parent, a brother/sister) with a formal clinical diagnosis (i.e. from a qualified health professional) of an autism spectrum disorder?

- Yes
- No

Display This Question:

If Do you have any immediate family member (a child, a parent, a brother/sister) with a formal clini... = Yes

How many autistic members do you have in your immediate family? (excluding yourself)

We will now ask you a number of questions about each one of your autistic family members.

We will now ask you some questions about your autistic family member.

What is the autistic person's sex (or gender they identify with)?

- Male
- Female
- Other
- Prefer not to say

What is the autistic person's age? (in years)

The person is attending or has attended

- Mainstream school
- Specialist provision (special school or unit)
- Other (please state) _____

Does the person have intellectual disabilities?

- Yes
- No

What other clinical diagnoses than autism does the person have? (tick all that apply)

- ADHD
- Epilepsy
- Dyspraxia
- None
- Other (please state) _____

What is the person's level of general cognitive ability (intellectual functioning, IQ)

- Above average
- Average
- Mild impairment
- Moderate impairment
- Severe impairment

The person can talk in

- Full sentences
- Short sentences
- Single words
- Non-verbal or minimally verbal

The person can understand

- Conversations
- Simplified short sentences
- Single words or symbols
- No single words or symbols

What are the person's reading skills?

- High/average - fluent reader
- Limited - some skills, but not fluent
- Low - beginning/pre-reading skills
- None - no reading skills

What level of support would you say the person requires?

- No support
- Some support
- Substantial support
- Very substantial support

How much interest is the person showing in digital technologies (e.g. smartphone usage)?

- High interest
- Moderate interest
- Low interest
- No interest at all

Is there anything else you would like to add about the profile of this autistic person?

Display This Question:

If Are you a professional / practitioner (in a school or health service, for example) who works with... = Yes

Or Do you have any immediate family member (a child, a parent, a brother/sister) with a formal clini... = Yes

You are now going to answer the main part of the survey. This one will take you approximately 15-20 minutes. You can take a break now and return to the survey later, if you need to.

In the previous survey we identified that the following sources of information are used when choosing a piece of technology for an autistic person (or yourself if you are autistic). We would like you to evaluate each of those for their relevance, importance, usefulness and accessibility to you.

Relevance = whether information from this source is likely to relate to your situation.

Importance = whether information from this source is likely to be high quality

Usefulness = whether information from this source is likely to make a difference to your decisions / actions

Accessibility = whether information from this source is likely to be easy to find and understand

Expertise of the product's development/design team

	1 = low	2	3 = medium	4	5 = high
relevance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
importance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
usefulness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
accessibility	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The product's development/design team specifically includes autistic people

	1 = low	2	3 = medium	4	5 = high
relevance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
importance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
usefulness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
accessibility	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Positive changes in the autistic user's behaviour

	1 = low	2	3 = medium	4	5 = high
relevance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
importance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
usefulness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
accessibility	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Academic research

	1 = low	2	3 = medium	4	5 = high
relevance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
importance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
usefulness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
accessibility	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Positive online reviews (e.g. Amazon stars, comments on product's facebook page)

	1 = low	2	3 = medium	4	5 = high
relevance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
importance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
usefulness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
accessibility	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Positive online reviews specifically from the autistic community

	1 = low	2	3 = medium	4	5 = high
relevance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
importance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
usefulness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
accessibility	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Is there another preferred source of information that you are using?

In the previous round, people mentioned some features (e.g. customisability) and outcomes (e.g. long-lasting changes in behaviour) that are important when selecting or recommending a piece of technology.

For each one we want to know what sources of information you would use to find out about those features/outcomes.

It is ok if you repeat the same information in your answers. It is also fine if you leave some of the fields blank.

Let's see an example:

Outcome:

You want to know whether a soft drink increases energy levels

Sources of information:

- 1 I look at its packaging to see if it contains caffeine.
 - 2 I search for results of a lab survey that studies its effects on people.
 - 3 I ask my best friend how she/he feels after drinking it.
-

You want to know whether a product has **ongoing tech support from the development team**

- 1 _____
- 2 _____
- 3 _____
-

You want to know whether **special interests of autistic people are taken into consideration in the product design**

- 1 _____
- 2 _____
- 3 _____
-

You want to know whether a technology **encourages original creations**

- 1 _____
- 2 _____
- 3 _____
-

You want to know whether a piece of technology is **aesthetically pleasant**

- 1 _____
- 2 _____
- 3 _____
-

You want to know whether it is **easy to use**

- 1 _____
 - 2 _____
 - 3 _____
-

You want to know whether it is **customisable**

- 1 _____
 - 2 _____
 - 3 _____
-

You want to know whether it is **easy to find and order/buy**

- 1 _____
 - 2 _____
 - 3 _____
-

You want to know whether **it can be used autonomously by the autistic person**

- 1 _____
 - 2 _____
 - 3 _____
-

You want to know whether **it helps the autistic person to be more autonomous in their life**

- 1 _____
 - 2 _____
 - 3 _____
-

You want to know whether **it contributes to a better life quality for the family/carers of the autistic person**

- 1 _____
 - 2 _____
 - 3 _____
-

You want to know whether **it is amusing/entertaining**

- 1 _____
 - 2 _____
 - 3 _____
-

You want to know whether **it helps the autistic person develop new skills/improve existing skills**

- 1 _____
 - 2 _____
 - 3 _____
-

You want to know whether **it encourages social interaction between the autistic user and other people**

- 1 _____
 - 2 _____
 - 3 _____
-

You want to know whether **the effects of its usage are long lasting**

- 1 _____
 - 2 _____
 - 3 _____
-

You want to know whether **the autistic user can generalise the skills they acquired via the technology in different contexts**

- 1 _____
 - 2 _____
 - 3 _____
-

You want to know whether **the product achieves better results than similar products that are not technology-based**

- 1 _____
 - 2 _____
 - 3 _____
-

You want to know whether **the product matches the *abilities* of the autistic user**

- 1 _____
 - 2 _____
 - 3 _____
-

You want to know whether **the product matches the needs of the autistic user**

- 1 _____
 - 2 _____
 - 3 _____
-

You want to know whether **the product is age-appropriate for the autistic user**

- 1 _____
 - 2 _____
 - 3 _____
-

You want to know whether there are **opportunities to try out the product before buying it**

- 1 _____
- 2 _____
- 3 _____

Below are some of the comments people made in the previous round. What do you think of each of them? Do you have similar experiences with technology for autistic people? Are your experiences significantly different? How and why is that?

"I need a piece of technology to help me keep track of anxiety and offer suggestions and tips based on my experiences"

"I would appreciate being able to buy harder levels or aspects of a game"

"I'd look whether this technology is approved by several scientific communities specialised in autism"

"I'd only rely on my personal judgement resulting from hands on experience"

"As there were bugs in the app the person got a bit angry with it and stopped using it"

"The technology we currently have does keep him entertained and occupied"

"He uses elsewhere the things he has learnt with the app"

Could you tell us in a few words what constitutes academic research for you?

Below are some sources of information about academic research on technology for autism.

Please rank them for their quality from 1 to 10, where 1 would be the lowest quality and 10 would be

the highest quality.

Drag & drop the sources to order them.

_____ Talk given by an academic

_____ Book on a scientific topic

_____ Newspaper article written by a scientist

_____ Academic article comparing a product with a similar non-tech product

_____ Official documentation by a government agency e.g. national health service

_____ Academic article evaluating a product's design

_____ Academic article comparing outcomes of a group that used a technology and one that did not

_____ Autism society's online guidelines

_____ Academic article evaluating the impact of a technology on one or more people

_____ Academic review that combines the results from multiple independent studies

Below are the same types of scientific evidence regarding technology for autism as above. Please rank them for their usefulness to you from 1 to 10. 1 would be the least useful and 10 would be the most useful.

_____ Talk given by an academic

_____ Book on a scientific topic

_____ Newspaper article written by a scientist

_____ Academic article comparing a product with a similar non-tech product

_____ Official documentation by a government agency e.g. national health service

_____ Academic article evaluating a product's design

_____ Academic article comparing outcomes of a group that used a technology and one that did not

_____ Autism society's online guidelines

_____ Academic article evaluating the impact of a technology on one or more people

_____ Academic review that combines the results from multiple independent studies

Is there anything else you would like to add?

Round 3

Do you have any conflict of interest related to this study to declare?

A conflict of interest exists when judgement concerning a primary interest (in this case, an autism practice) may be influenced by a secondary interest (such as financial gain or personal rivalry). We therefore ask you to disclose any such potential conflict of interest.

Examples might include:

- Financial associations with companies that market technologies that may be used by autistic people.
- Non-financial associations with specific technologies such as having been involved in their design or development.

If you're not sure, it's best to select "Yes" and give us the details. Having a conflict of interest won't mean you are removed from the study. It's just useful contextual information for us.

Yes

No

Display This Question:

If Do you have any conflict of interest related to this study to declare?

Yes

You said you have a potential conflict of interest related to this study. Please specify

A few quick questions about you:

What are the academic fields you specialise in?

What is your current job title?

What is/are your current affiliation(s)?

Approximately how many years have you worked on autism and technology?

0 2 4 6 8 10 12 14 16 18 20
or
more



Aspects of technological products and pieces of information

Having analysed responses from the previous rounds, we've concluded that there are *three main aspects* of information for the evaluation of a tech product for autism: 1. **The product is reliable** 2. **The product is engaging** 3. **The product is efficient** You can find the explanation of those aspects in the next section. Participants have also contributed pieces information for those aspects of a product. Not all aspects seemed to have the same pieces of information. We will now ask you to rank those pieces of information. Not all items will make it to the final checklist. It all depends

on how the panel will rank them and what comments will be provided to justify those rankings. So make sure to prioritise the items you want to see in the final checklist and persuasively argue in favour of your preferences

Definitions of the three aspects of a product

1. The product is reliable

The efficacy of a product at the level of engineering. Is it technically sound/functional? How well does it work? e.g. Does their face recognition functionality actually work? Does the app crash often?

2. The product is engaging

The user perception of the technology. How usable, agreeable, pleasant and accessible a product is for the specific users? Its ease of use/look & feel.

3. The product is efficient

The outcome of using the product. How much impact does it have to the people using it? Does it make an observable difference in the user's life/behaviour?

The product is **reliable**

The efficacy of a product at the level of engineering. Is it technically sound/functional? How well does it work? e.g. Does their face recognition functionality actually work? Does the app crash often? Please read each of the statements below concerning the product's reliability. Then drag and

drop them to rank them in order of importance for a consumer seeking information about a product's reliability. 1 is the most important.

- _____ Read an academic article evaluating a product's design
- _____ Watch an advertisement showcasing the product's functionalities
- _____ Read an autism society's online guidelines or brochures on specific technologies
- _____ Search the bio of the development team
- _____ Read a book on the specific technology
- _____ Consult the company's brochure
- _____ Consult the company's social media posts
- _____ Request an official trial version
- _____ Try it out unofficially (e.g. try out an app on the tablet of a colleague)
- _____ Search for information directly from the developers
- _____ Consult the FAQs of company's website
- _____ Ask in forums and relevant social media groups (e.g. on Facebook)
- _____ Only rely on fully using the product yourself
- _____ Consult the Help section of company's website
- _____ Read the product's manual/guide
- _____ Read a media article on the technology written by a scientist
- _____ Consult the News & Updates section of company's website
- _____ Read official documentation provided by a state agency (e.g. council on technology standards)
- _____ Read online reviews (e.g. App store)
- _____ Look at the product's packaging
- _____ Ask your personal network
- _____ Read reviews from autistic users
- _____ Listen to a talk given by an academic
- _____ Consult the technical description of the product on the company's website

Other members of the panel might disagree with you. Explain briefly your preferences to help reach a consensus.

Please justify at least your top 3 rankings:

- 1- _____
- 2- _____
- 3- _____
- 4 _____
- 5- _____

Please justify at least your lowest 3 rankings:

- 24- _____
- 23- _____
- 22- _____
- 21- _____
- 20- _____

Is there a piece of information for this aspect of a product (i.e. its reliability) that you think we should add?

Do you think we should remove one or more of the above pieces of information for this aspect of a product? (You might find it irrelevant or of low quality, for example)

The product is **engaging**

The user perception of the technology. How usable, agreeable, pleasant and accessible a product is for the specific users? Its ease of use/look & feel.

Please read each of the statements below concerning how engaging a product is. Then drag and drop

them to rank them in order of importance for a consumer seeking information about this aspect of a product. 1 is the most important.

- _____ Read an academic article evaluating a product's design
 - _____ Watch an advertisement showcasing the product's functionalities
 - _____ Read an autism society's online guidelines or brochures on specific technologies
 - _____ Search the bio of the product's content editor
 - _____ Search the bio of the development team
 - _____ Read a book on the specific technology
 - _____ Search for case studies on company's website or social media
 - _____ Consult the company's brochure
 - _____ Consult the company's social media posts
 - _____ Contact the sales team of the company
 - _____ Request an official trial version
 - _____ Try it out unofficially (e.g. try out an app on the tablet of a colleague)
 - _____ Search for information directly from the developers
 - _____ Consult the FAQs of company's website
 - _____ Ask in forums and relevant social media groups (e.g. on Facebook)
 - _____ Google search about the company's ethos
 - _____ Only rely on fully using the product yourself
 - _____ Read a media article on the technology written by a scientist
 - _____ Read official documentation provided by a state agency (e.g., state institute of technology)
 - _____ Read online reviews (e.g. App store)
 - _____ Look at the product's packaging
 - _____ Ask your personal network
 - _____ Read reviews from autistic users
 - _____ Take the recommendation of a professional (e.g. teacher, speech therapist)
 - _____ Listen to a talk given by an academic
 - _____ Consult websites reviewing and comparing technology
-

Other members of the panel might disagree with you. Explain briefly your preferences to help reach a consensus.

Please justify at least your top 3 rankings

- 1- _____
- 2- _____
- 3- _____
- 4- _____
- 5- _____

Please justify at least your lowest 3 rankings

- 26- _____
- 25- _____
- 24- _____
- 23- _____
- 22- _____

Is there a piece of information for this aspect of a product (i.e. the product is engaging) that you think we should add?

Do you think we should remove one or more of the above pieces of information for this aspect of a product? (You might find it irrelevant or of low quality for example).

The product is **efficient**

The outcome of using the product. How much impact does it have to the people using it? Does it make an observable difference in the user's life / behaviour?

Please read each of the statements below concerning how efficient a product is. Then drag and drop

them to rank them in order of importance for a consumer seeking information about this aspect of a product. 1 is the most important.

_____ Read an academic review that combines the results from multiple independent studies

_____ Watch an advertisement showcasing the product's functionalities

_____ Read an autism society's online guidelines or brochures on specific technologies

_____ Search the bio of the product's content editor

_____ Search the bio of the development team

_____ Read a book on the specific technology

_____ Search for case studies on company's website or social media

_____ Consult the company's brochure

_____ Consult the company's social media posts

_____ Request an official trial version

_____ Try it out unofficially (e.g. try out an app on the tablet of a colleague)

_____ Consult the FAQs of company's website

_____ Ask in forums and relevant social media groups (e.g. on Facebook)

_____ Google search about the company's ethos

_____ Only rely on fully using the product yourself

_____ Read a media article on the technology written by a scientist

_____ Consult the News & Updates section of company's website

_____ Read official documentation provided by a state agency (e.g. health organisation)

_____ Read online reviews (e.g. App store)

_____ Ask your personal network

_____ Read reviews from autistic users

_____ Take the recommendation of a professional (e.g. teacher, speech therapist)

_____ Listen to a talk given by an academic

_____ Consult websites reviewing and comparing technology

Other members of the panel might disagree with you. Explain briefly your preferences to help reach a consensus.



Please justify at least your top 3 rankings

- 1- _____
- 2- _____
- 3- _____
- 4- _____
- 5- _____

Please justify at least your lowest 3 rankings

- 24- _____
- 23- _____
- 22- _____
- 21- _____
- 20- _____

Is there a piece of information for this aspect of a product (i.e., the efficiency of a product) that you think we should add?



Do you think we should remove one or more of the above pieces of information for this aspect of a product? (You might find it irrelevant or of low quality, for example).

You have completed the mandatory part of the survey.

In the next three sections we will ask you questions that will help us refine the checklist and get a broader idea of the practices and challenges of the community.

You can provide as much input as you wish.

Here's the list of all pieces of information provided by the whole panel *regardless of the aspect of the product* they correspond to. If we were to publish them, do you think they would be **understandable** to the autism community? Would you change anything about their **wording**?

Please enter your comments and suggestions underneath each piece of information. You may comment/amend as many as you wish.

Ask in forums and relevant social media groups (e.g., on Facebook)

Ask your personal network _____

Consult the company's brochure _____

Consult the company's social media posts _____

Consult the FAQs of company's website _____

Consult the Help section of company's website

Consult the News & Updates section of company's website

Consult the technical description of the product on the company's website

Consult websites reviewing and comparing technology

Contact the sales team of the company _____

Google search about the company's ethos _____

Listen to a talk given by an academic _____

Look at the product's packaging _____

Only rely on fully using the product yourself

Read a book on the specific technology _____

Read a media article on the technology written by a scientist

Read an academic article evaluating a product's design

Read an academic review that combines the results from multiple independent studies

- Read an autism society's online guidelines or brochures on specific technologies

- Read official documentation provided by a relevant state agency

- Read online reviews (e.g. App store) _____
- Read reviews from autistic users _____
- Read the product's manual/guide _____
- Request an official trial version _____
- Search for case studies on company's website or social media

- Search for information directly from the developers

- Search the bio of the development team _____
- Search the bio of the product's content editor

- Take the recommendation of a professional (e.g. teacher, speech therapist)

- Try it out unofficially (e.g. try out an app on the tablet of a colleague)

- Watch an advertisement showcasing the product's functionalities

Do you have any comments on how a piece of information should be used or filtered? i.e. what are the risks / optimal ways of using it?

An example could be like:

You want to wear something nice tonight. You borrow the dress of a friend who generally has a very good taste.

Potential risk: The friend's dress size is different from yours.

Please fill in potential **risks or ways to filter** each piece of information. You may comment on *as many pieces of information as you wish*.

- Ask in forums and relevant social media groups (e.g. on Facebook)

- Ask your personal network _____
- Consult the company's brochure _____
- Consult the company's social media posts _____
- Consult the FAQs of company's website _____
- Consult the Help section of company's website

- Consult the News & Updates section of company's website

- Consult the technical description of the product on the company's website

- Consult websites reviewing and comparing technology

- Contact the sales team of the company _____
- Google search about the company's ethos _____
- Listen to a talk given by an academic _____
- Look at the product's packaging _____
- Only rely on fully using the product yourself

- Read a book on the specific technology _____
- Read a media article on the technology written by a scientist

- Read an academic article evaluating a product's design

- Read an academic review that combines the results from multiple independent studies

- Read an autism society's online guidelines or brochures on specific technologies

- Read official documentation provided by a relevant state agency

- Read online reviews (e.g. App store) _____
- Read reviews from autistic users _____
- Read the product's manual/guide _____
- Request an official trial version _____
- Search for case studies on company's website or social media

- Search for information directly from the developers

- Search the bio of the development team _____
- Search the bio of the product's content editor

- Take the recommendation of a professional (e.g. teacher, speech therapist)

- Try it out unofficially (e.g. try out an app on the tablet of a colleague)

- Watch an advertisement showcasing the product's functionalities

We chose some pieces of information that can have different sources. Where do you think would be best to try and find the pieces of information listed below?

An example could be like: You want to look at the local weather forecast to find out if tomorrow is a good day for a barbecue. You check your weather app on your smartphone.

Please fill in your sources of information underneath each piece of information. You may provide your sources *for as many pieces of information as you wish*.

- Ask in forums _____
- Consult websites reviewing and comparing technology

- Search about the company's ethos _____
- Listen to a talk given by an academic _____
- Read a book on the specific technology _____
- Read a media article on the technology written by a scientist

- Read an academic article evaluating a product's design

- Read an autism society's online guidelines or brochures on specific technologies

- Read official documentation provided by a relevant state agency

- Read reviews from autistic users _____
- Search for information directly from the developers

- Search the bio of the product's content editor

- Take the recommendation of a professional (e.g. teacher, speech therapist)

- Ask in social media groups _____
- Search the bio of the product's development team

- Read the product's manual/guide _____

Is there anything else you would like to add?

Round 4

How to select technologies for autistic users: an evidence-based framework

Attached is a checklist for people choosing technologies for themselves, and on behalf of others. We will ask you to review the whole checklist so you can get a sense of what it looks like, how the information is organised as a whole, and how it would appear to a user.

There are three things one might be looking for when selecting or recommending a piece of technology: how reliable it is, how engaging it is, and how efficient it is in meeting the user's goals.

For each feature, we list key pieces of evidence that can help someone in selecting the best available technology. They are listed in order of importance (1 = most important; 5 = least important).

Click on the link below to view the checklist in pdf format (opens in new window)

[How to select tech for autistic users - Checklist Draft](#)

Please keep the pdf of the checklist handy, in case you need to have a look at it at a later stage.

This is the main part of the survey. We will ask you to look at each section and at each item separately to potentially change their order and / or wording.

Is the product **reliable**?

The efficacy of a product at the level of engineering. Is it technically sound / functional? How well does it work? e.g. Does their face recognition functionality actually work? Does the app crash often?

You may re-rank the items for this section of the checklist. Put the number that represents your preferred order next to each item. 1 = most important and 5 = least important

_____ Try it out

_____ Read online reviews

_____ Get an expert opinion

_____ Seek academic opinions

_____ Consult the company's website

For each statement please tell us whether: - you agree it should be in the checklist with this wording - you'd make adjustments to it and why - you'd remove it completely and why

1. Try it out. You might request a trial version from the developer, or borrow a copy / device from a friend. Take your time to explore all the functionalities. Bear in mind that a trial version might differ from the full version.

Read online reviews. Look on app review sites and social media. Include reviews from autistic users and their families and pay attention to long-time users. Keep in mind that reviewers' circumstances (e.g. their needs, goals or budget) may not be the same as yours.

Get an expert opinion. Ask people you know who have skills and experience with technology, or read official documentation provided by agencies such as a government council on technology standards.

Seek academic opinions. Read an academic article evaluating a product's design. You might also see scientists writing in the mainstream media or find a talk given online. Check the academic's relevant qualifications, affiliations and potential conflicts of interest when you decide how much trust to put in them.

Consult the company's website. While this information does not constitute independent evidence, the technical description of the product and the kind of technical support may be informative. You can also look for tech industry accreditations such as kite marks, badges, ISO norms etc.

Is the product **engaging**?

The user perception of the technology. How usable, agreeable, pleasant and accessible a product is for the specific users? Its ease of use / look & feel.

You may re-rank the items for this section of the checklist. Put the number that represents your preferred order next to each item. 1 = most important and 5 = least important

_____ Get an expert opinion

_____ Read online reviews

_____ Try it out

_____ Seek academic opinions

_____ Consult review websites

For each statement please tell us whether: - you agree it should be in the checklist with this wording - you'd make adjustments to it and why - you'd remove it completely and why

1. Get an expert opinion. Ask people you know who have skills and experience with technology. Talk to relevant professionals such as a teacher or speech and language therapist.

2. Read online reviews. Include reviews from autistic users and their families and pay attention to long-time users. Keep in mind that reviewers' circumstances (e.g. their needs, goals or budget) may not be the same as yours.

3. Try it out. You might request a trial version from the developer, or borrow a copy / device from a friend. Take your time to explore all the functionalities. Bear in mind that a trial version might differ from the full version.

4. Seek academic opinions. Read an academic article evaluating a product's design. You might also see scientists writing in the mainstream media or find a talk given online. Check the academic's relevant qualifications, affiliations and potential conflicts of interest when you decide how much trust to put in them.

5. Consult review websites. Look for sites that compare different technologies and search for case studies.

Is the product **efficient**?

The outcome of using the product. How much impact does it have to the people using it? Does it make an observable difference in the user's life/behaviour?

You may re-rank the items for this section of the checklist. Put the number that represents your preferred order next to each item. 1 = most important and 5 = least important

- _____ Read an academic paper
- _____ Read online reviews
- _____ Get an expert opinion
- _____ Search online for expert perspectives
- _____ Try it out

For each statement please tell us whether: - you agree it should be in the checklist with this wording - you'd make adjustments to it and why - you'd remove it completely and why

1. Read an academic paper. Ideally look for a review that systematically combines the results from multiple independent studies. It may be worth checking the quality of the original studies too and the journals where they were published.

2. Read online reviews. Include reviews from autistic users and their families and pay attention to long-time users. Keep in mind that reviewers' circumstances (e.g. their needs, goals or budget) may not be the same as yours.

3. Get an expert opinion. Talk to relevant professionals such as a teacher or speech and language therapist. Ask people you know who have skills and experience with technology, or take the advice of reference centres. Read official documentation provided by agencies such as a government council on technology standards.

4. Search online for expert perspectives. Read a media article on the technology written by a scientist or listen to a talk given by an academic. Check the academic's relevant qualifications, affiliations and potential conflicts of interest when you decide how much trust to put in them. Consult websites that review and compare technologies, and search for relevant case studies.

5. Try it out. You might request a trial version from the developer, or borrow a copy / device from a friend. Take your time to explore all the functionalities. Bear in mind that a trial version might differ from the full version.

Is there any sort of information or comment you think should accompany the checklist (printed on the back of the document / in an appendix / on an accompanying website) ? Those can include clarifications, disclaimers, words of caution. Please write any such comments below.

Specific sources of information when looking for technology for autism

Where do you search for the aforementioned pieces of information? Which are your preferred sources? Those can include but are not limited to review websites, books, forums, magazines, scientific journals, channels, podcasts.

Please try and be specific in your answers and provide us with links where appropriate.

You may list as many specific sources as you wish.

- 1 _____
- 2 _____
- 3 _____
- 4 _____
- 5 _____
- 6 _____
- 7 _____
- 8 _____
- 9 _____
- 10 _____

Is there anything else you would like to add?
