User research with older populations

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rikwilliams.net/talks/user-research-older-populations/

How ageing affects us, why it's important and **actionable tips** for running inclusive user research with older people.

User research with older people — practical tips and guidelines

How ageing affects us, why it's important and actionable tips for running inclusive user research with older people.

Saturday 12th June 2021

A person in their 80s using a web service on a smartphone during contextual user research.

rikwilliams.net/articles/older-people-tips-guidelines/

Structure

What we'll cover in this session...

Who's talking?

Why it's important?

When do people become 'old'?

How does ageing affect people?

Practical tips for user research with older populations

Discussion

Hi, I'm Rik

Content context

...or where these insights are *weighted*

- Moderated research

- In-person research

- "Older people"

  - sometimes living with age-related disease(s)

  - I've *excluded* insights specific to research people with dementia(s)

Why research with older people is important

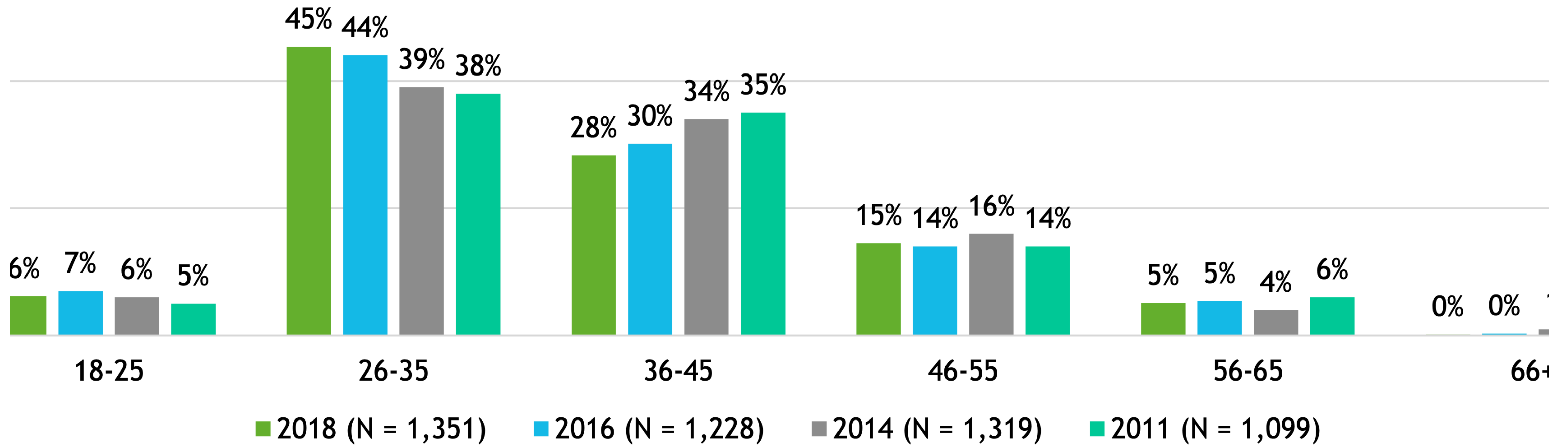# "It's easy for our teams to be tribal and for the customer to be [or to become] a stranger"

Gerry McGovern

74%

of UXPA members are between 26 and 45

Don Norman, 86

| Age	2018 (N = 1,351)	2016 (N = 1,228)	2014 (N = 1,319)	2011 (N = 1,099)
18-25	6%	7%	6%	5%
26-35	45%	44%	39%	38%
36-45	28%	30%	34%	35%
46-55	15%	14%	16%	14%
56-65	5%	5%	4%	6%
66+	0%	0%		

Source: *Salary Survey,* User Experience Professionals' Association International, 2018

"When you include the extremes of everybody, that's to say differently abled people of all sorts, then you produce things that are better for all of us."

Micheal Wolff

When do people become 'old'?
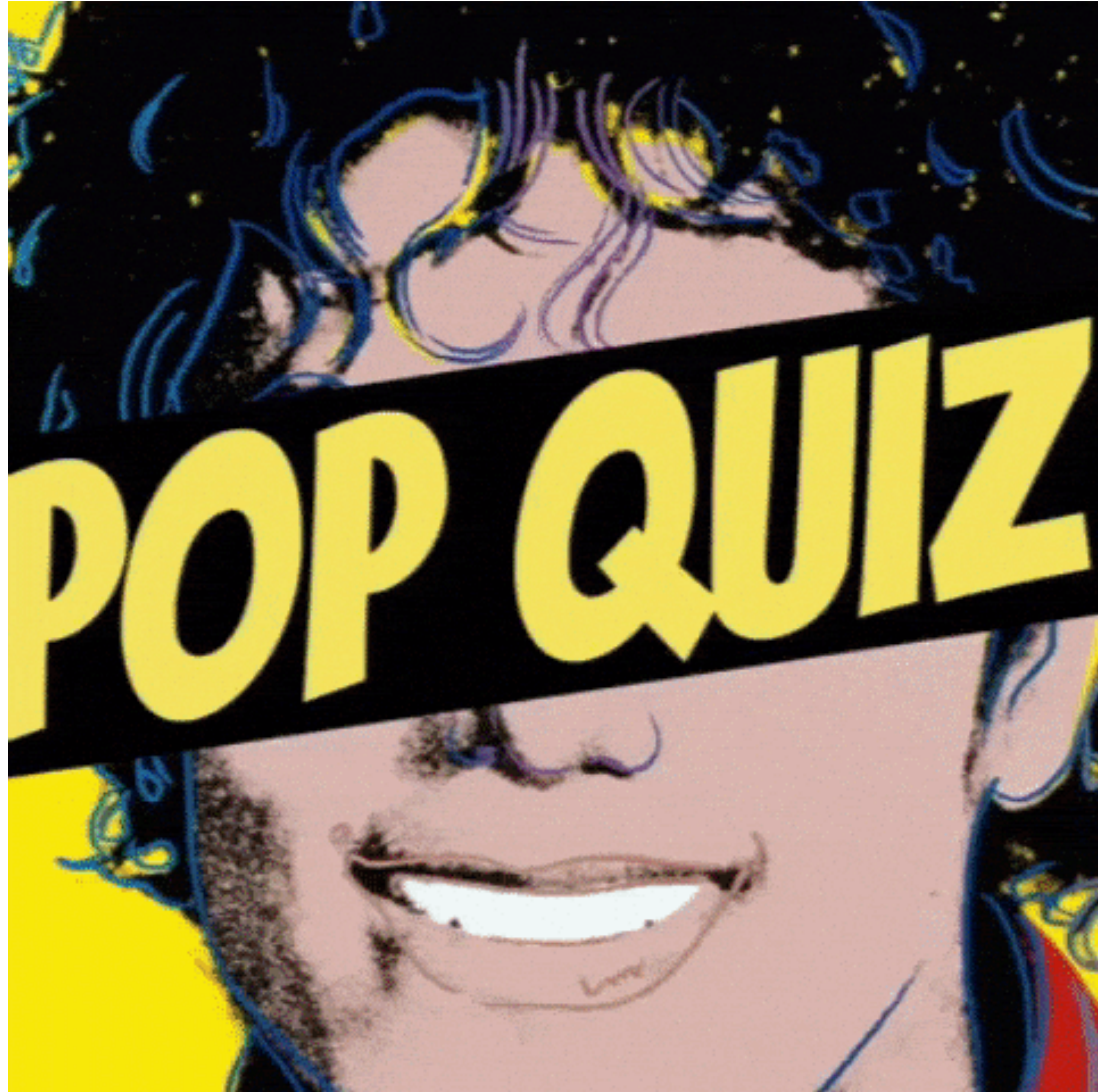
"At what age is a person 'old'?"

🤔

"Ageing is a lifelong process, starting when we are born"

Jeff Johnson

"Old is at least 10 years older than I am now!"

Adage, Anon.

Responders Age	When they think 'old age' starts
40s	63
50s	68
60s	73
70s	75

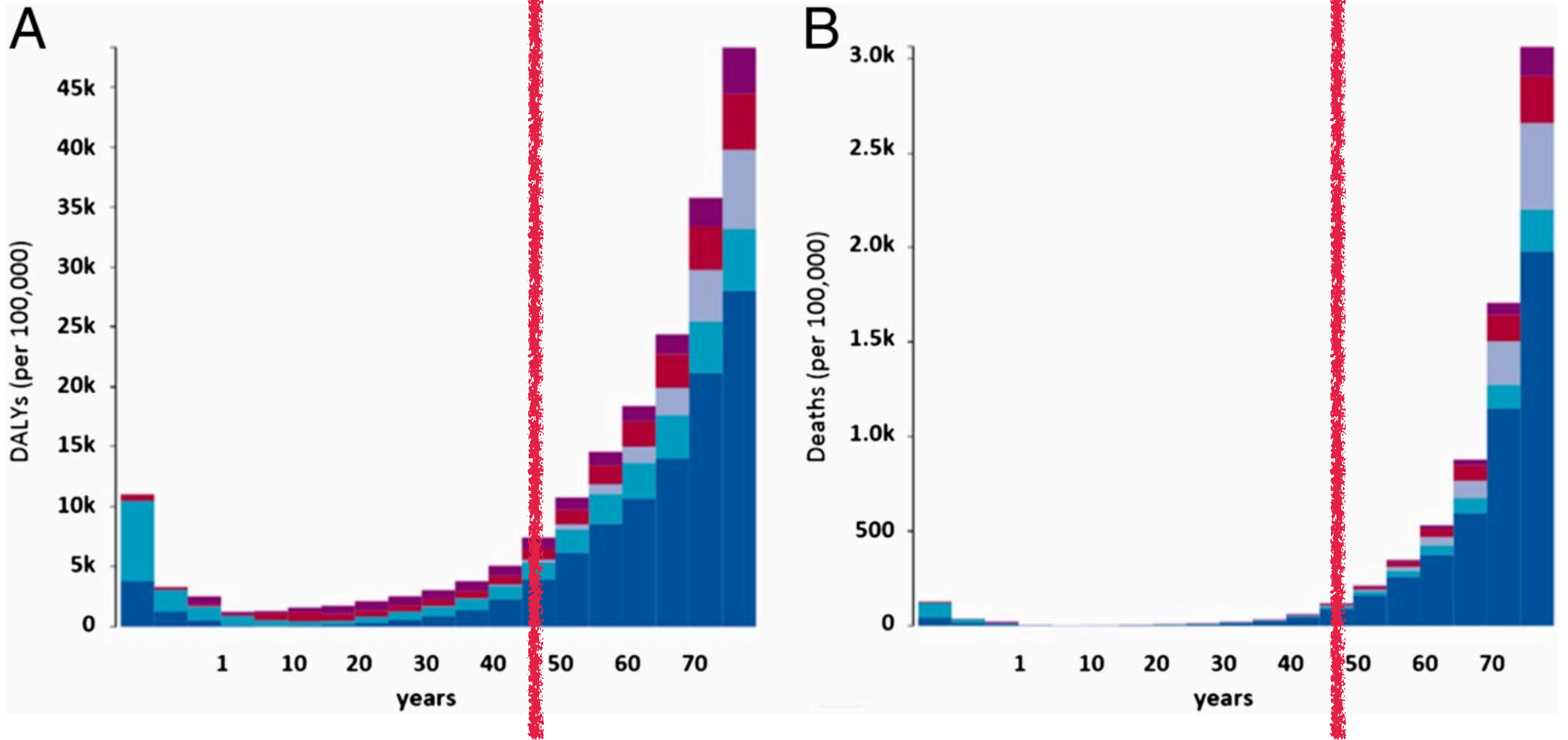Source: *You're old, I'm not: how Americans really feel about ageing.* AARP, 2014

50+

A good starting point for defining 'older-hood' for user research purposes

70+

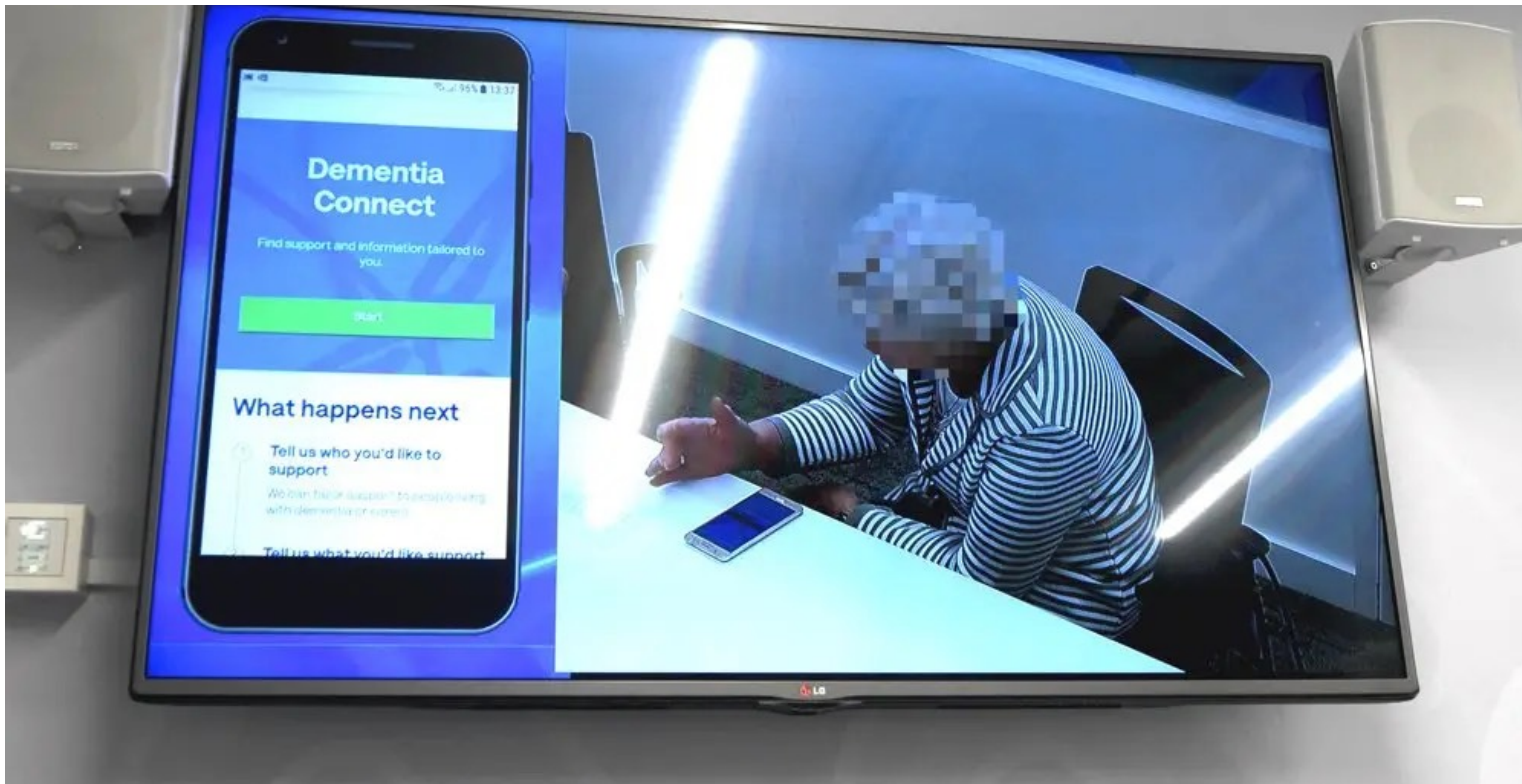**Where user research with older people gets *really* interesting**

Source: *Quantification of biological ageing in young adults*, PNAS, 2015

How does ageing affect people?

Beliefs and Behaviours

Beyond an older person's perception of their age, there are two general things which can be more common in digital user research: **fear** and **confidence**.

A person in their mid/late 70s, recruited directly from a production digital service, in an interaction lab

Beliefs and Behaviours

- Fear of making errors, appearing naïve or breaking something

- Concerns about privacy and data use

- Low confidence and task abandonment rate (x2 younger people)

- Longer sessions (time needed, re-checking, taking less efficient routes)

- Modifying facilitation style (capabilities vs research objectives)

Motor control

As we age, our ability to manipulate things with our arms, hands, and fingers tends to decline. Then add in disease(s), or the impact of drugs.
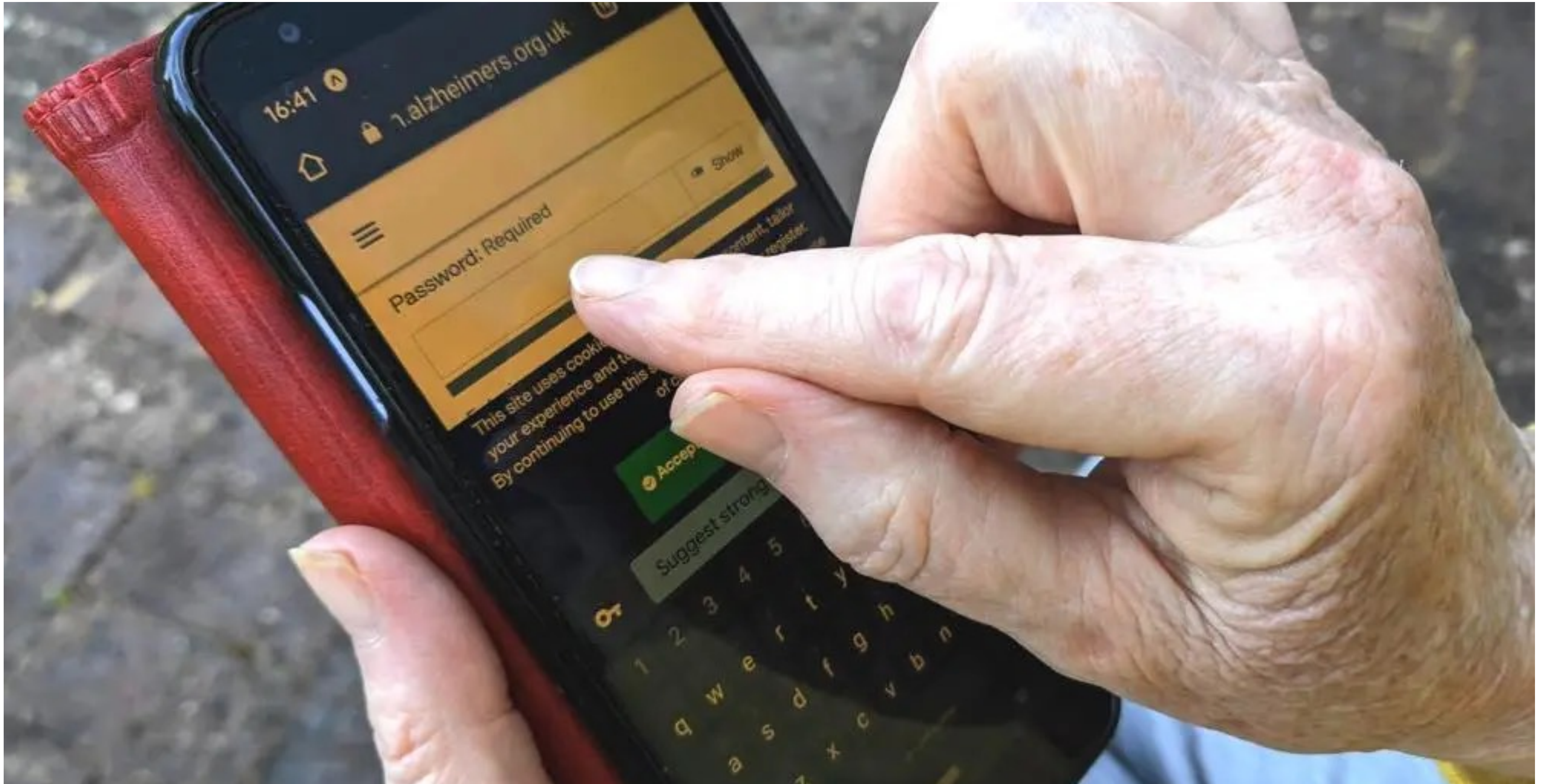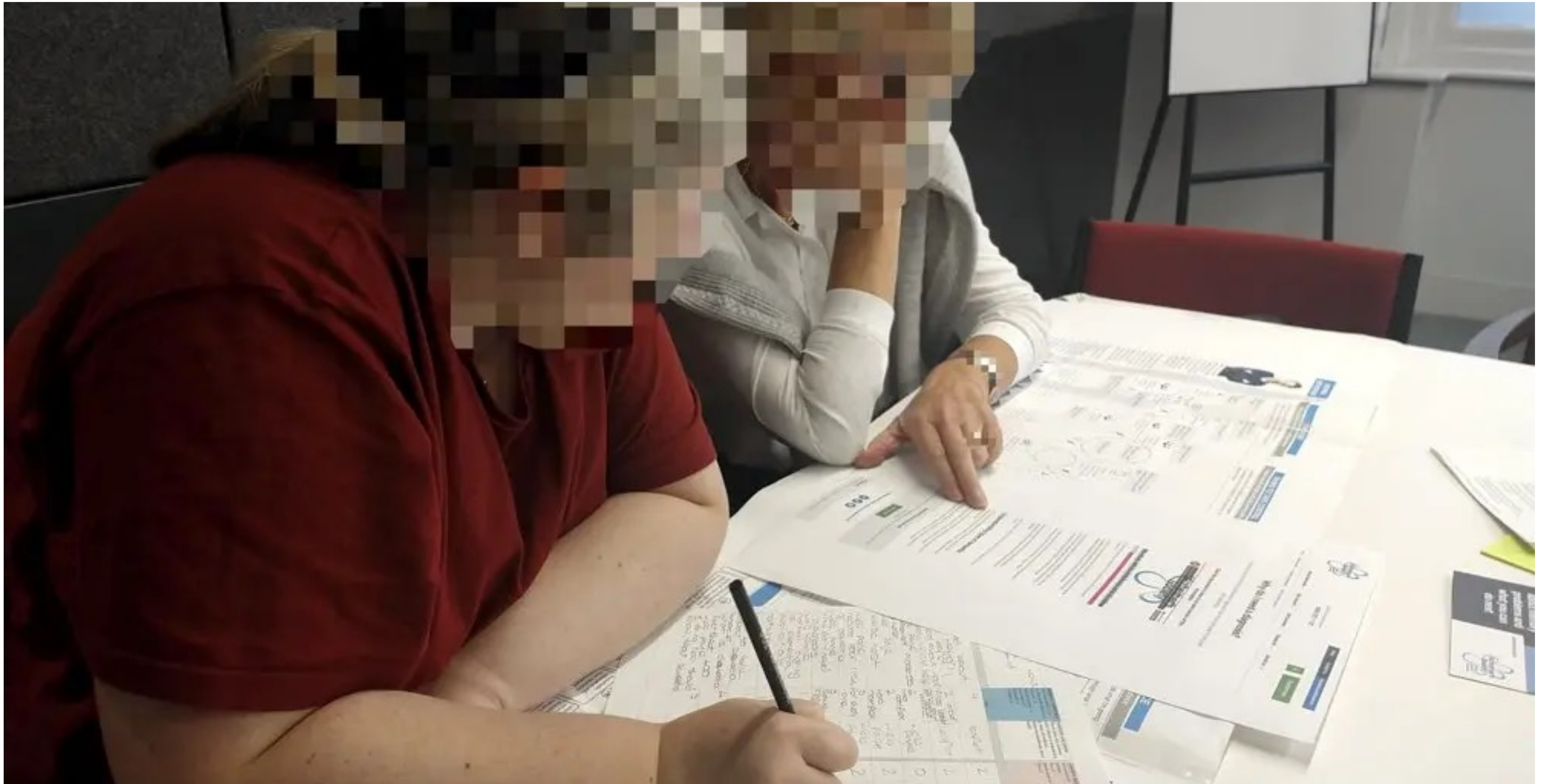
A participant in their mid 70s with mild arthritis working a complex touch interface during contextual research.

Hearing

Loss of hearing also accelerates as people enter their 50s (and is the second most common age-related impairment after arthritis).

A participant in their early 70s living with fronto-temporal dementia AND with hearing loss.

Paired participants in their mid-50s / late-70s evaluating aspects of a content strategy elsewhere in the room.

Hearing

- Plan for hearing impairments during aural screening and research

- Factor for and avoid noisy research environments (cafes, group-based research)

33%

of people aged 60-65 will have problems with normal aural communication...

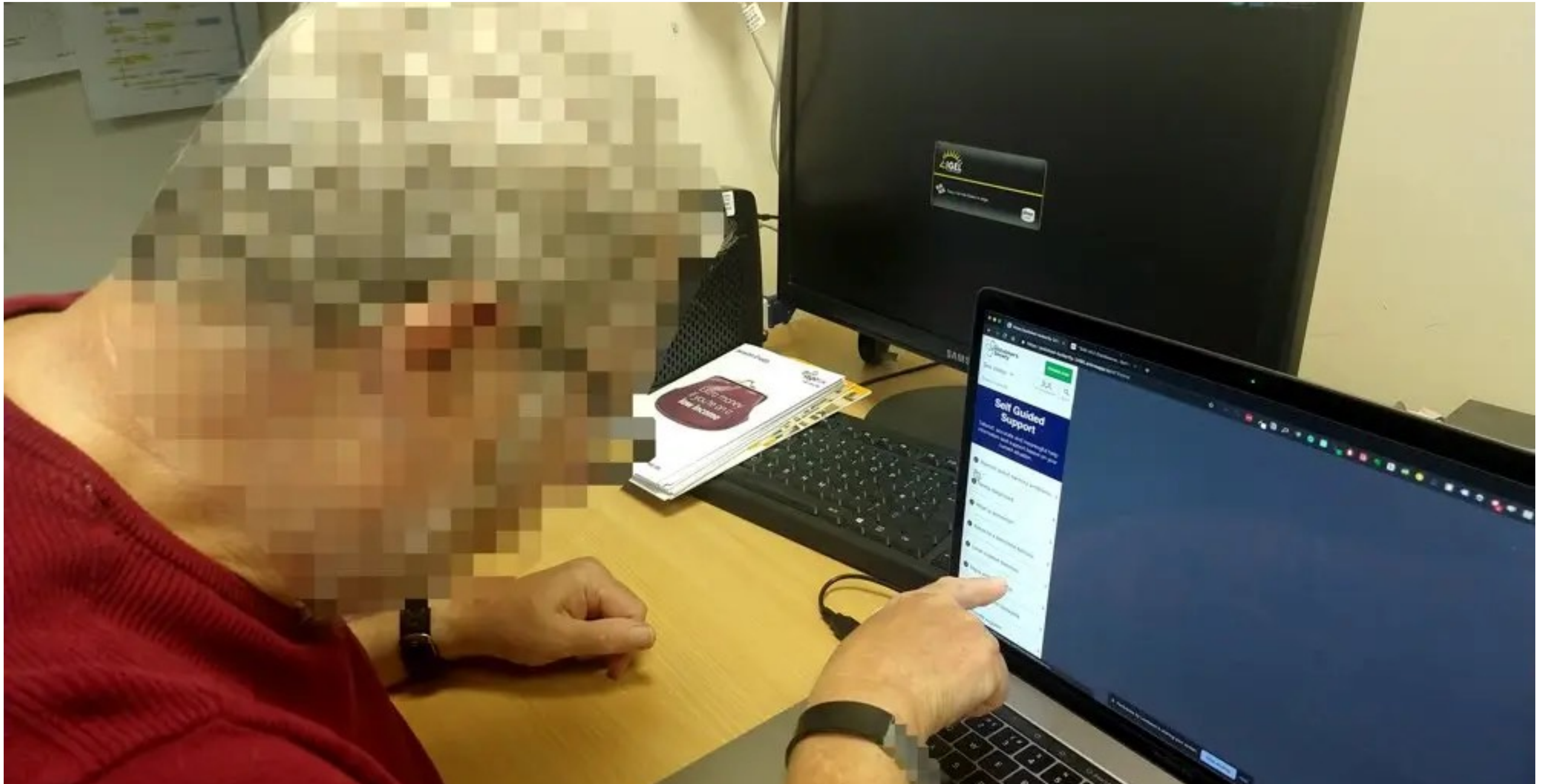...rising to...

89%

...by age 80

Vision

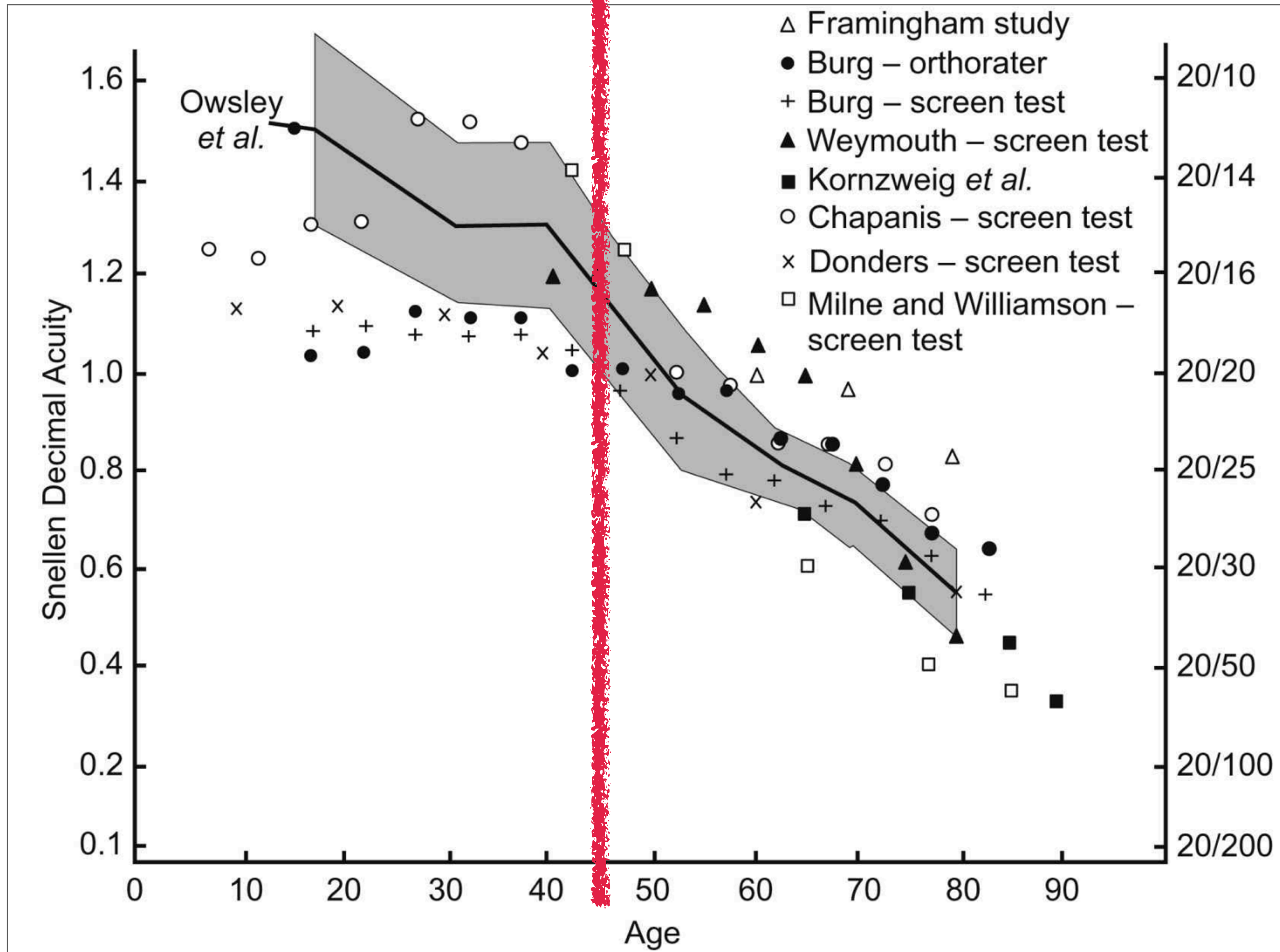Eyesight tends to get worse as people age, even without the impact of injury or disease. Expect to encounter issues with seeing fine detail, focussing on nearby objects and the impact of glare*.

*very much *not* an exhaustive list!

A participant in their early 60s with corrected vision (glasses) encountering issues with glare, acuity and presbyopia.

Mean visual acuity as a function of age Owsley *et al.* 1983

Cognition

Most cognitive abilities decline with age, starting as early as our 30s. However, people vary enormously as to *which* abilities, *when* the decline starts and a *what* rate.

A person in their late-70s in an interaction lab who experienced issues with mixed/mild age-related cognitive decline.

Practical tips for user research with older people

Structure

What we'll cover in this section…

Screening older people

Scheduling with older people

During research time

Closing the user research

These guidelines seek to balance aspects of best practice for any inclusive user research with areas more *specific* and *frequent* in older people

This advice is more *likely* to apply more *often* than with younger participants (but *not always*)
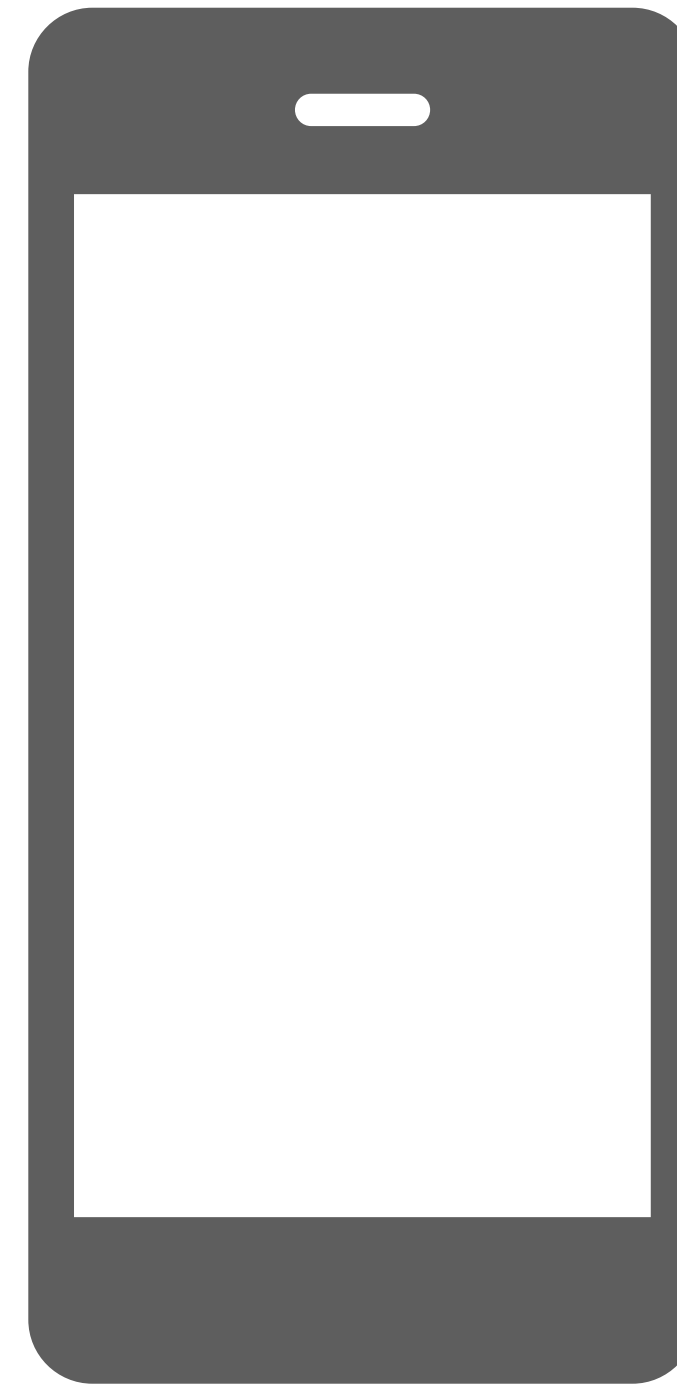
In-person only   Remote only

Screening older people

Avoid cold calling

If you're recruiting from a database of participants then consider initiating contact for your study by message, first.

Immediate credibility, legitimacy

Older people can be *especially* sensitive about contact by strangers. Be meticulous in your content/design.

Immediate credibility, legitimacy

- Ensure a clear, well formed/optimised, lede or subject line

- Truly personalise content to the participant

- Use official account(s) for contact

- Include logo, physical address, registrations (beyond corporate style guidelines)

- Provide clear opt-outs (action, process)

- If proposing days/times for screening proper — stick to them

Be more flexible in your methods of contact

Remember that older people are more likely to live with a disability than the general population.

80%

of disability is acquired *AND* at an average age of 53

Factor for digital literacy

Evaluate participant digital literacy, but expect false perceptions about their suitability.

Compared to extensive users of digital, limited users are...

8x

...more likely to be >65 years

UK population

14%   **7%**   **79%**
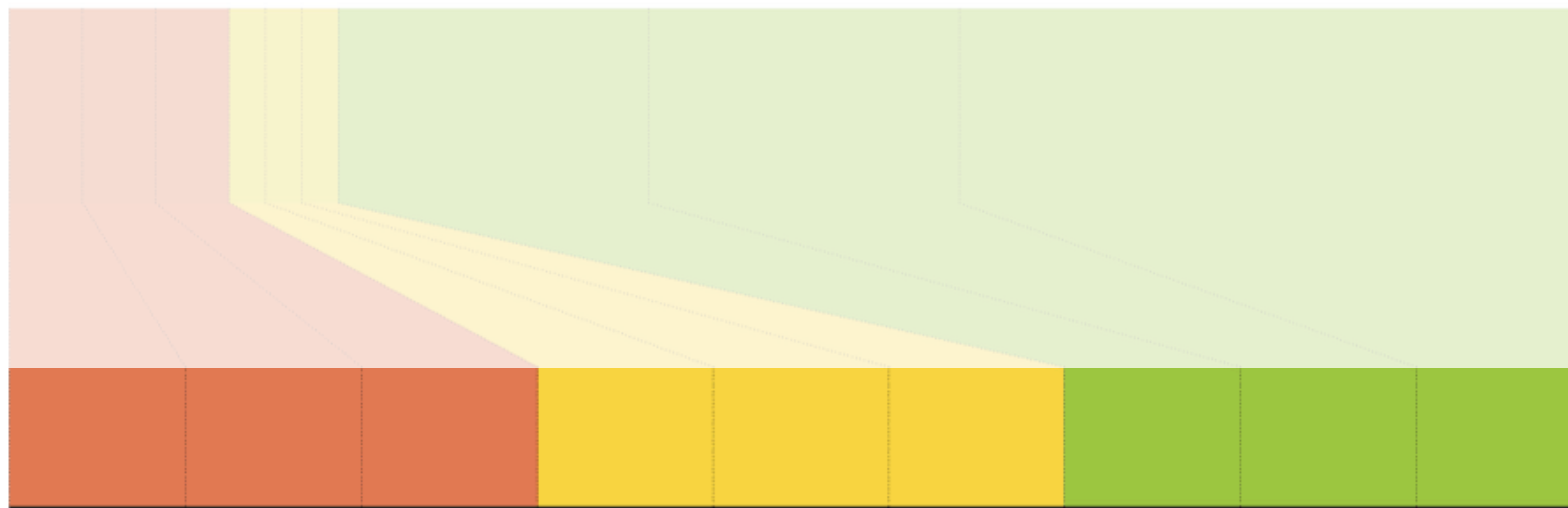
1	2	3	4	5	6	7	8	9
Never have, never will	Was online, but no longer	Willing and unable	Reluctantly online	Learning the ropes	Task specific	Basic digital skills	Confident	Expert

Digital inclusion scale

	0	1	2	3	4
I can turn on a device and log in to any accounts/profiles I have					
I can use the available controls on a device (e.g. mouse, keyboard, touchscreen etc)					
I can use the different menu settings on a device to make it easier to use (e.g. change the font size to make it easier to read)					
I can find and open different applications/programmes on a device					
I can connect a device to a Wi-Fi network					
I can open an internet browser to find and use websites					
I can update and change my password when prompted to do so					

	0	1	2	3	4
Send an email					
Delete spam emails					
Find stuff using a search engine such as Google					
Watch a video on YouTube or Netflix etc					
Fill out an application form or buy something online					
Use a mobile app, like Google Maps etc					
Evaluate whether a website is safe/can be trusted					
Chat with friends/family using Zoom, WhatsApp etc					

Factor for digital literacy

Practical tips

- Preempt any false perceptions of suitability based digital confidence

- Be clear that you're looking for 'normal people' (unless you aren't!)

- Assess digital literacy at second-stage screening (without being 'techy')

- Note any likely confidence issues and bridge to research time facilitation

Check and assess functional diversity

Older people are not a homogenous group. They are often living with age-related health conditions which may be pertinent to your research (or which may affect your study design).

Check and assess functional diversity

Screen for:

- wider accessibility needs (think: diseases like arthritis, low vision, dementias)
- social needs (think: impact of caring responsibilities)
- digital adaptations (think: actual or needed)

Ask participants to bring their:

- personal devices
- artefacts like 'computer glasses', magnifying glasses, hearing aids etc.

Scheduling with older people

Be flexible

Wherever possible, work in sympathy with the participants *schedule*, *location* and *logistics*

Be flexible

Travelling to real-world research:

- avoid peak times

- consider a research space near transport hubs

- offer taxi transfers and/or shepherding

- consider remote, or contextual, alternatives (where ideal is in-person research)

Expect longer lead times

Don't assume that older people, including those who are retired, are time-rich. Similarly, that they are always online.
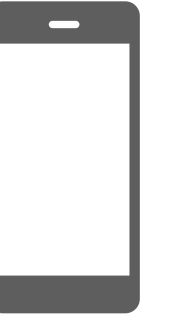
Over recruit

It's often a good idea to recruit at least one extra participant for any study. This is even more true for older adults.

For larger studies consider over recruiting by...

15%

...and falling back on remote moderated research and/or rescheduling (depending)

Prevent predictable technology problems

Consider scheduling time to set-up and/or familiarise the participant with the software* used to enable remote research so that the session itself is protected.

*Lookback, Zoom etc

Landing the participant

Older people can benefit from a more rigorous and/or hands-on approach* to structuring their journey into research-time than with younger people.

*depends on the individual, but can similar to other more extreme audience groups.

Landing the participant

- Send a clear, specific summary of the research

- Go beyond essentials, like start/end time and date

- Include transport suggestions, printable maps, photos of the entrance

- Include specific reminders about things to bring (like 'computer glasses')

- Follow-up across mediums as research time approaches

During user research time

Expected the unexpected

People are messy. It's the basis for our profession, but can disrupt research time. Older people are more likely to have needs beyond younger participants.

Last-minute cancellations

Older people can need to react to unforeseen circumstances. Have options in place continue to include them.

Very early arrivals

Older people can arrive >20minutes before a session. Sometimes up-to 1-hour. Have resources in place to accommodate them.

Ad hoc shepherding

Assume that at least 1 participant will be overwhelmed and lost inside the 'last mile' to the research space. Even if they've turned down offers of support during screening.

Create a familiar environment

Make a space which is representative and adaptable to the needs of the participants

Try to limit novel, unfamiliar or fatiguing variables with might affect data quality and ethics

Create a familiar environment

- remove any distractions like:

  - lighting (especially which cause glare)

  - temperature (especially cold)

- configure any technology to the participant (if needed)

Companions

Allow people to bring companions, whether they ask (or simply bring them!) Have plans in place so that they don't adversely affect the session.

Set expectations early

Remind the participant of the purpose of the study, its parameters. Reassure them why *their* insight is needed.

Warm-up and practise

Spend time demonstrating any methods with an exercise so that the participant comprehends the study's mechanics.

Research instructions

Ensure that participants understand any instructions. Ask the participant to playback in their own words. Be prepared to repeat them (if necessary with different words) throughout the session.

P4: Scenario A

You mentioned that Keith was diagnosed with posterior cortical atrophy in 2018 and that his memory problems have become more severe recently. For example, he is struggling with everyday tasks like making you a cup of tea.

Make it really real

Older people can have trouble imagining "real-life" situations that *don't actually* reflect their real lives. Ideally, make scenarios truly bespoke.

Think about Think-aloud

Consider whether to use retrospective or concurrent verbal playback during a research method.

Stay on topic, stay on target

Be mindful of a tendency to chat, reminisce, or stray from a topic during your session. Especially in participatory/group research

Allow extra time (but run to time)

Older people may take longer to do things and can need extra facilitation (especially in group-based research) to stay focussed.

Visual processing speed declines by...

50%

...between 70 and 80 years

Add an extra...

15-minutes

...for every 1-hour of research time with older people

Avoid trying to cover too much

Expect to cover fewer tasks, or interview questions, in a session than your might with younger people

Avoid trying to cover too much

Consider:

- chunked, shorter, sessions with built in breaks

- a single session, but with more limited objectives

Look out for:

- participant fatigue (more likely, more quickly)

- loss of focus

- needing more time (than younger people)

Positive predispositions

Expect positive responses to prototypes, production or brand. A tenancy to praise rather than offend (vs. provide objective views).

Self-blaming

Expect a general tendency to blame self when encountering issues (not the designer or developer).

Anxiety, fragile confidence

You'll often (but not always) see fragility in confidence in discussing or using technology. Specifically anxiety about doing (or saying) something 'wrong', or breaking things.

User diaries

Beware that factors like inexperience can affect the data. Regularly check the data. Be ready to quickly with 121 support/discussion

Closing the research

Like any user research, close your study with any summative exercises, remaining administration or answers for participant questions. However, be prepared to *go further* for older people…

Provide immediate support

You might have observed that the participant struggled with something related to their needs, the product, their system set-up or their abilities.

Provide follow-up support

Your product, service or organisation may meet real health or social needs for your participant.

Discussion

🤔

Discussion ideas…

- Did any of this chime with your research practice?

- What changes have you seen with remote research with older people since 2020?

- Is there anything you want to hear more about?

- Do you disagree with anything I've covered?

- How do you find older people for your research?

…