

# Ageism in Interfaces

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Hi, I'm Alex (she/her)

- **Georgian Bay, Canada**
- **Mom (1-2 humans, 2 dogs, 1 cat)**
- **Freelance a11y specialist**
- **RuPaul's drag race enthusiast**
- **Maker of things (mostly music and food)**

## Agenda:

- 1. Ageism**
- 2. The “Grey” Divide**
- 3. Opportunity**
- 4. Let’s do better**

## Disclaimer

**This is a BIG SUBJECT. I can't cover it all. We're discussing a broad group who cannot be uniformly categorized. Some terms used may be offensive to some.**

# 1. Ageism



# Definition: Ageism



“Prejudice or discrimination against a particular age-group and especially the elderly”

# Definition: Ageism



“A socially constructed way of thinking about older persons based on negative attitudes and stereotypes about aging and a tendency to structure society based on an assumption that everyone is young, thereby failing to respond appropriately to the real needs of older persons”

“Ageing is stereotypically framed as a problem needed to be fixed, and older adults are considered to be frail and incompetent.”

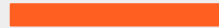
- Inclusion of Older Adults in the Research and Design of Digital Technology



## 3 types of Ageism

- 1. Macro (culture, social values, policy)**
- 2. Meso (groups and organizations)**
- 3. Micro (individuals)**

# Macro Ageism



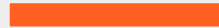
“old age itself is a devalued status in Western society and likewise carries social assumptions about the ability to be productive in society... Persons who are both older and functionally limited may have a doubly diminished social status”

- When Do Older Adults Become “Disabled”? Social and Health Antecedents of Perceived Disability in a Panel Study of the Oldest Old

“Health has long been identified as a marker of social status... Persons who are viewed as vigorous and well are considered to have a higher capacity for fulfilling social expectations and obligations”

- When Do Older Adults Become “Disabled”? Social and Health Antecedents of Perceived Disability in a Panel Study of the Oldest Old

# Meso Ageism



“A recent study found that healthcare professionals hold highly negative attitudes towards older persons’ abilities to use healthcare digital technology...could potentially lead to discriminatory practice, such as not offering technology-based treatment or assistive technologies to older patients based on the ageist belief that they won’t be able to use it”

- AGEISM & DIGITAL TECHNOLOGY: Policy Measures to Address Ageism

↻ Everyday Ageism Retweeted



**Jonathan Taylor** @crystalclearjt · Feb 12



So apparently you don't qualify for a postgraduate loan if you're over 60. If that's not horrendous ageism, I don't know what is [@ucu](#)  
[@UniversitiesUK](#) [@educationgovuk](#)



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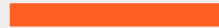
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# Micro Ageism



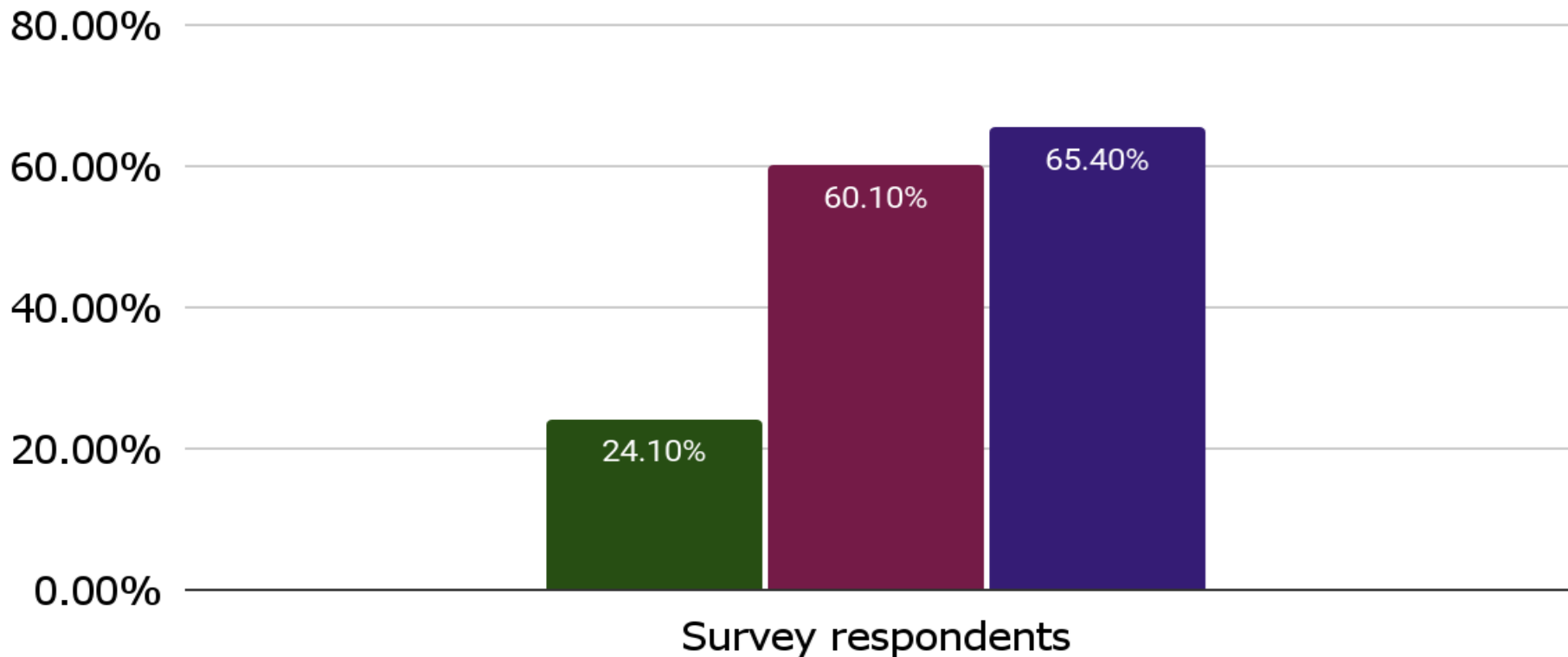


“a high proportion of older adults who are classified as disabled do not consider themselves disabled”

- When Do Older Adults Become “Disabled”? Social and Health Antecedents of Perceived Disability in a Panel Study of the Oldest Old

## Identify as disabled, use zoom, use captions

■ Identify as disabled ■ Use zoom ■ Use captions



43.4% of Canadians  
over 65 are disabled

Globally 46% of people  
over 60 are disabled

# National Poll on Healthy Aging: 3 types of Everyday Ageism

- 1. Exposure to ageist messages - 65%**
- 2. Ageism in interpersonal interactions - 45%**
- 3. Internalized ageism - 36%**

OLAY

“Join me in the battle  
against ageing!”



I feel very proud to be a part of the brand that has made millions of women feel younger. Olay total effects carries everything that you would need for your complete skin care regimen and puts to rest 7 signs of skin ageing such as open pores, fine lines and dark spots. From moisturizing to sun protection, Olay total effects has everything that will make your skin glow and give it a youthful appearance. So why not try Olay total effects and join me in the battle against ageing!



- Dark spots
- Dry skin
- Dull glow-less skin
- Lines & wrinkles
- Sagging skin
- Open pores
- Uneven skin tone

TRY  
Olay total effects

“ According to the stereotype embodiment theory, exposure to the negative stereotypes of old adults during one’s lifetime could lead to the implicit internalization of ageism”

- Inclusion of Older Adults in the Research and Design of Digital Technology

## 2. The “Grey” Divide





# Digital Divide

- A significant social and knowledge gap associated with the worldwide diffusion and adoption of technology
- Associated with a reported negative impact on health, income, civic participation and education

## “Grey” Divide

- **exclusion from digital technology by researchers, designers, marketing strategists and entrepreneurs**
- **self-exclusion from digital technology by older adults**

Seniors are not a monolith



# Digital Technology User Types

- 1. Non-Users**
- 2. Reluctant Users**
- 3. Apprehensive Users**
- 4. Basic Users**
- 5. Go-Getters**
- 6. Savvy Users**

# Apprehensive Users



We're failing capable seniors with unintuitive interfaces

“ elderly people performed worse on a memory test when they were primed with negative rather than positive stereotypes”

- An age apart: The effects of intergenerational contact and stereotype threat on performance and intergroup bias.

“Seniors get very upset and frustrated, even angry that they can't do it! Even more so when their grandchildren some very young say it's easy let me do it... I picture phones and tablets flying through the air and through the window!”

“It feels sometimes like I am stupid because  
so very little is intuitive”



“I think there’s an assumption that we all grew up with technology or all used it in our careers”

“It’s a wonder I haven’t shattered my phone/iPad etc. because I have thrown them more than once. Using my phone/iPad/Dell makes me so anxious at times that I am reduced to angry tears”

“I don't know enough to even guess what could be done to make it easier. I am falling further behind every day. I'm now afraid to try something new in case I screw up my device and cause more work”

# Savvy Users



We're ignoring seniors who are very skilled  
daily active users

“I'm the one likely to be showing them how to do something. I've been on the internet since 1995, and had email and topic posting since 1991”

“I help run a cyber senior program that helps/ teaches seniors how to use iPads and iPhones, with other seniors available to teach android or computers!”

“Virtually all the apps I use make accessing  
what I want easier”

“My job is heavily dependent on technology;  
it could be done without tech, but it's  
infinitely easier with tech”



“Over nearly 30 years of internet usage, things have continued to improve for me, as a blind user. It has made newspapers and other sources of literature available almost instantly. These are positives that should be noted”

# Ageism in the Tech Workforce



We make things for ourselves

# Unconscious Bias in Design

- 1. Confirmation bias**
- 2. Optimistic bias**
- 3. Omission bias**
- 4. False consensus bias**
- 5. Perception biases**
- 6. Status Quo bias**



“Young  
people  
are just  
smarter”

“2018 AARP survey found that three in five workers aged 45 and over have either witnessed age discrimination or experienced it themselves”

- What does ageism in tech look like?

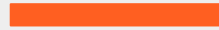
“To reflect the phenomenon of extreme ageism in modern high tech and start-up working environments, the term Silicon Valley ageism has been coined, which describes the dominant ageist attitudes of most enterprises in this sector”

- Ageism and Age Discrimination in the Labour Market: A Macrostructural Perspective

# 3. Opportunity



# Generational Wealth



Baby boomers are the wealthiest generation in history



“Baby boomers are collectively 10 times wealthier than millennials”

- Average net worth per generation

“ In 2021, the baby boomer generation owned 44.1% of all real estate in the U.S... millennials [owned] 11.2%”

- Average net worth per generation

“In 2021, the average net worth in an American household aged 64-75 reached over \$1.2m, while the average household under 35 had a net worth of just \$76k... The average 64-75-year-old American is 94% wealthier than the average 35-year-old”

- Average net worth per generation

“ millennials are expected to inherit over \$68 trillion from their predecessors by 2030, meaning that in less than 10 years’ time they will have accumulated as much as five times the wealth they currently hold”

- Average net worth per generation

# Ageing Population

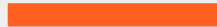


Where will we be by 2050?

“each successive cohort of older persons can expect to live longer and possibly also have fewer adult children as potential sources of support in old age.”

- UN World Population Aging Report

Millennials will be seniors



# 4. Let's do better

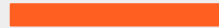




“there seems to be a discrepancy between digital technologies that are developed and what older adults actually want and need”

- Inclusion of Older Adults in the Research and Design of Digital Technology

# Independence, Autonomy and Social Connection



<b>Type of activity</b>	<b>Senior population requiring assistance</b>	<b>Senior population receiving assistance</b>	<b>Senior population that have unmet needs</b>	<b>Proportion of seniors that have unmet needs</b>
Preparing meals	418 850	378 530	78 630	18.8%
Housework	724 400	629 280	199 710	27.6%
Heavy household chores	963 630	839 490	322 510	33.5%
Running errands	740 170	691 930	180 600	24.4%
Finances	402 400	384 420	48 700	12.1%
Personal care	283 690	253 440	70 980	25.0%

“artificial intelligence in assistive technology can assist older people with cognitive impairment to continue living in their homes by developing technology to support their functional independence”

- Inclusion of Older Adults in the Research and Design of Digital Technology

“older adults are willing to use technologies that allow them to maintain social connections and independence”

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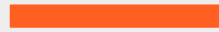
“digital media can reduce levels of loneliness and strengthen interconnections for those living in assisted and independent living communities [and] can help maintain and extend social networks through frequent communication—in particular, contact with distant family and friends at a distance that increases their quality of life”

- Dividing the grey divide

“the internet as a communication tool has been associated with a lower level of loneliness... elicited closer family ties, and led to a greater overall connection to society”

- Inclusion of Older Adults in the Research and Design of Digital Technology

What survey respondents ask for





# Customer Support



“AI chatbots are the worst”

## Question:

“Are there any activities that have become more difficult or easier for you now that they are online? (e.g. getting customer support from a chat service vs talking to someone on the phone, booking an appointment, etc). Please feel free to share specific experiences if you are comfortable.”

“Online chats are very frustrating. I have never had success. Inevitably end up having to speak with a human, which is preferable”

“Chat robots are not often useful, because they only know the standard info, which I could find in FAQ”

“Talking with a human has become more difficult. AI chatbots are the worst”

“Chat features are a pain! Gets easier when you get a real person and not pre program answers!”

“Chat bots are a waste of my time. Phony social graces, and they don't understand nuance”

“it would be preferable to be given the option right at the beginning to continue on-line, or speak to a human”



“Support calls and chats say my screen reader is causing the problem when, in fact, it is their site's inaccessible access that is”

Plain language, clear instructions



## Question:

“What do you wish websites and/or apps did differently to make your experience online smoother?”

“I prefer clear language and design principles implemented in words”

“Having very easy to follow using step by steps instructions helps. Often YouTube is easier to follow”

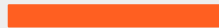
“Using my medical clinic site and the site of a social service agency recently, I could not discern what I was actually supposed to do or not do to access services in either of these two agencies - in three tries for both at decoding. And yet I am a careful reader who can overcome disabilities to complete a PhD, research, publish etc”

“Do not assume I know every step or what they mean when they use initials”

“I wish that they would take you through the process step by step and more importantly let you make adjustments when you've made a mistake. I have in the past left a website because I couldn't figure out how to make a change”



Standard patterns, easy navigation and  
meaningful search



“I find it impossible to navigate many sites. This includes medical, government, booking appointments, buying tickets”

“Websites vary a great deal. Some are really circular and unclear”

“Sites that provide search need to provide *good* search”

“Make sure menus are at the top, or in a sidebar, not on the bottom, of a webpage”

“I'm always getting messed up on Alphabet sites because they seem to be different for the sake of being different”

“My bank site was user friendly, then in 2020 they did a redesign that makes the site less friendly because it is now hard to navigate. It appears to be designed for millennials and gen z generations”

“Reduce the clutter. Amazon.com is a great example of a (too much) junked up site; many websites seem to try to do too many things on one page and others actually change their layout as soon as an item is clicked”



“Make search engines that actually return results related to what was requested instead of assuming you meant the most popular result. I am so very frustrated with the results that the AI's assumes I want”

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Clear privacy protection,  
easy cancellation of services



“The office interface software (booking appointments and checking in) has clearly never had user testing. It has non-standard controls, tiny fonts, doesn't work properly on mobile, and the privacy policies often grant permission to sell personal medical data. Who reads these? People have no idea that they are giving these companies legal access to their HIPPA-protected data”

“I don't like having different passwords for different passwords for eg. amazon. Without realizing it I signed up for Prime movies.It was difficult to cancel”

“There are so many services and information sources you cannot access without registering and creating a password”

“Fear of hacking via phishing emails limits my experimentation”

“I am afraid to open a lot of things for fear that I will be tracked or trapped”



“Renewal that are automatic and hidden in the small print- they never seem to be for my benefit”

“A couple of times I've ended up paying for something I didn't want”

“I once tried to fix a problem I had with my newspaper delivery and I went online as directed. I got to one page and pushed the icon button and continued only to find out that I ended up paying a completely different company that had posted an ad on the Star page. I ended up having to cancel my credit card because the company ran out of the Cayman Islands, which apparently is notorious for these scam products”

“I feel my reluctance to use a lot of apps and websites is due to the amount of personal/contact information they ask for. If you comply you frequently end up being bombarded by unwanted communications and feel that too much is known about you by entities you know nothing about. The downside of this for me is that I could probably benefit from a richer range of information and services if this aspect was not a huge deterrent for me”

Label your dang icons!

## Question:

“Do you feel that websites and/or apps make assumptions about what you should intuitively understand? (e.g. using a gear icon to represent a settings menu, perhaps the text "settings" would be more intuitive)?”

“what is gear icon?”

“I can't even understand the language in the brackets here. So yes there are lots of assumptions. If the information presented in "help" pages or by company representatives used everyday language and descriptors instead of language or word combinations that have been newly created to "explain" the various technologies, it would go a long way to making them feel accessible to older users”



“icons are based on outdated notions (eg floppy disk icon to mean "save") or are inscrutable (eg wavy lines and a circle to mean ... well, I still haven't worked that one out)”

“I'm always having to point out to my 83 year old mother that the icon is what she needs to tap to do something. One of the most confusing is either the ellipses icon or the share icon (rectangle with arrow going out the top) for her”

“Tiny, tiny, incomprehensible icons, especially on mobile. It’s often difficult to tell the difference between them, let alone what they mean”

“I coach other seniors on iPhones and iPads and they often don't realize what various icons mean - eg. three lines or three dots to indicate another menu”

“Label icons, don't assume everyone gets your cute ideas, cognitive disabilities are the largest disability group. Then you also have people from other countries who don't have the same cultural references for your cute icons. Help everyone out and include words that make the functionality clear”

“graphics without labels it becomes guesswork to navigate”

# Additional Recommendations



## Co-design with seniors

- 1. Inclusion in research/co-design**
- 2. Setting and communication**
- 3. Tools and methods**
- 4. Interpretation of contributions**
- 5. Stage in design process**

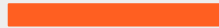


“Many sites clearly don't test accessibility with seniors who may not intuitively grasp what is needed and how to provide it or obtained it”

“the designer should use the website/app as if they were the user. The joke in our house is that they are designed by 18 year olds who don't actually use them”

“Test with older users and people with disabilities of all types. Blind - screen reader users are great at finding the underlying structural semantic issues. Those with cognitive disabilities and the aging populations will help you reduce the over-business of sites where they don't communicate clearly”

# Hire Seniors



“many governments [are] increasing the statutory ages at retirement in an effort to prolong the labour force participation of older persons and improve the financial sustainability of pension[s]”

- UN World Population Aging Report

“Hire devs and QA staff over age 50. Don't give them fast computers or large screens”

“Major providers need to hire people my age”

## Respect WCAG

- 1.  $\frac{1}{3}$  of seniors have hearing loss**
- 2.  $\frac{1}{3}$  of seniors have vision loss**
- 3.  $\frac{1}{3}$  of seniors have serious mobility limitations**
- 4. 40% of seniors have a cognitive impairment, 10% have dementia**



# Thank you!

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Twitter: [@at\\_fresh\\_solutions](#)

Website: [atfreshsolutions.com](http://atfreshsolutions.com)

# Citations/Sources

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- [Work Environment and the Origin of Ageism](#)
- [Dividing the Grey Divide: Deconstructing Myths About Older Adults’ Online Activities, Skills, and Attitudes](#)
- [National poll on healthy aging](#)

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- [Ageism and Age Discrimination in the Labour Market: A Macrostructural Perspective](#)
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- [Unconscious Biases That Get In The Way Of Inclusive Design](#)