GenerationTech – Ageing, Technology and Health from a Generational Perspective

SUSANNE IWARSSON, PHD, PROFESSOR, DHC, REG. OT
Knowledge gaps – unique perspectives

• Few studies about technology highlight older people’s specific knowledge, experiences and needs

• Most studies focus solely on digital technologies (ICT), with no attention to the broad spectrum of technologies in everyday life

• Generational perspectives - different kinds of experiences hitherto not studied
Generations of people and technology

Cohort effects
Period effects
Bodies of theory:
- Gerontechnology
- History of technology
- Learning
- Occupational therapy
- Cognitive science
Knowledge gaps

• Much focus on ICT, but what about other types of technologies – traditional and digital?
  
  – **everyday technology** (refrigerators, kitchenware, cars, new lightbulbs, TVs etc);
  
  – **information and communication technology** (smartphones, surf tablets, computers, etc);
  
  – **welfare technology** (safety alarms, night cameras, eHealth solutions etc. provided by the society);
  
  – **medical and assistive technology** (walkers, wheelchairs and communication aids, artificial body organs etc)
  
  – finally **branch-specific technology** (only mastered by professional specialists).
The GenerationTech project

The overarching aim is to generate new knowledge on:
- perceptions of and attitudes to different types of technology
- how these are associated with active and healthy ageing
- with specific attention to age cohort and period similarities and differences.
Studies

I. Focus groups
   - 3 age-homogenous (30-39, 50-59, 70-79)
   - 3 age-mixed

II. Web survey a) general; b) COVID-19 specific

III. World Cafés in four EU countries; Sweden + Latvia, Germany, Italy
Research questions

• What types of technology and technology shifts do adults in different age cohorts define as influential on their everyday life though their course of life?

• What are the attitudes to different types of technology, their usefulness, ease of use and complexity, etc., among adults in different age cohorts?

• What types of technology experienced during their lifetime do they perceive as important for active and healthy ageing?

• What are the characteristics of adopting different types of new technology, in different adult age cohorts? (which products, when, at what age, how long did it take, positive and negative experiences)

• How do different age cohorts relate to the shortening lifespan of products and the challenges implied by the continuous technological advancement of products used in everyday life?

• Are there any gender differences related to these research questions? If so, of what character?
“Am I representative (of my age)? No, I'm not”

- Technologies enable as well as complicate everyday life
- Participants expressed trust as well as uncertainty about risks when using technology
- They stated that use of digital services is required while the support is limited
- They identified that technology development is inevitable but not always in the service of users

(Fristedt et al., under review)
Technologies enable as well as complicate everyday life

- Individual but also generational perspectives displayed
- Interest for traditional rather than digital contact and challenges more pronounced
- Strategies to deal with complications less pronounced with increasing age

- Facilitating and flexible products save time and give freedom
- Technologies support health and security
- Digital technology is challenging for the users
- Dealing with short-lived and vulnerable technology
- Digital services support and disrupt social interaction

Trust and uncertainty about risks when using technology

- Awareness and interpretation of risks varies individually, while the 30-39 year olds generally seem more trustworthy and the 70-79 year olds more afraid of risks than the other generations

- Trust that personal data is kept safe
- Personal data utilised beyond my control
- Being too dependent on technologies

Use of digital services is required, but support is limited

- General agreement on necessity and challenges to keep up, while the 50-59 and 70-79 year olds expressed more concerns about groups struggling to keep up with digitalization and at risk of digital exclusion

- Expected to keep up with the development
- Strategies to avoid exclusion
- Inclusion through support and competence

Technology development is inevitable, but not always in the service of users

- The 50-59 and 70-79 year olds dominate discussions focusing largely on ethical perspectives in relation to technology development and future technology.

- Technology development is a natural process
- Technology develops beyond users’ needs and desires
- Future technology evokes concerns combined with expectations
Conclusion, focus group study

- Experiences of and attitudes towards technologies and technology development are not limited to generation
- Perspectives sometimes unite individuals across rather than within generations
- Future technologies should consider individual user perspectives and needs beyond generations defined by chronological age
- Such strategies are likely to be more successful in supporting development of technologies usable for all
## GenerationTech Survey Study

<table>
<thead>
<tr>
<th>Age group</th>
<th>Gender; Total (Men/Women)</th>
<th>Ways of responding; Phone/online/postal</th>
</tr>
</thead>
<tbody>
<tr>
<td>30-39</td>
<td>639 (316 / 323)</td>
<td>16 / 622 / 1</td>
</tr>
<tr>
<td>50-59</td>
<td>703 (345 / 358)</td>
<td>20 / 682 / 1</td>
</tr>
<tr>
<td>70-79</td>
<td>779 (420 / 359)</td>
<td>42 / 718 / 19</td>
</tr>
<tr>
<td>Total</td>
<td>2121 (1081/1040)</td>
<td></td>
</tr>
</tbody>
</table>

Random population sample: Response rate 22%

(COVID-19 extension, Kantar SIFO webb panel: Response rate 33%)
Representativeness?

The large sample resembles the Swedish population:

• The majority (78 %) had at least a high school degree (85 % in the general population)

• Close to half (49 %) compared to 42 % in the general population had a university degree

• Most were born in Sweden (90 %) and lived in a larger or major city (∼75 %), which is in accordance with Statistics Sweden

• Different socio-economic classes and nationalities = a diverse sample
Technology I would like to use for Active and Healthy Ageing

PERS = Personal Emergency Response System

Offerman et al., in progress
Reasons to use technology for Active and Healthy Ageing

Reasons to use technology
- Age 30 - 39
- Age 50 - 59
- Age 70 - 79
Attitudes to ICT

Information and Communication Technologies are

- Useful
- User Friendly
- Necessary needs
- Practical
- Intrusive
- Time Saving
- Trustworthy
- Safe to use
- Make me independent
- Restricts integrity
- Forced to use

Percent (%)

Age 30 - 39 | Age 50 - 59 | Age 70 - 79

Useful: 73 | 67 | * 57
User Friendly: 50 | 35 | 24
Necessary needs: 59 | 61 | 53
Practical: 64 | 50 | *
Intrusive: 70 | 61 | *
Time Saving: 61 | 60 | *
Trustworthy: 20 | 20 | 16
Safe to use: 22 | 22 | 19
Make me independent: 30 | 38 | 33
Restricts integrity: 14 | 14 | *
Forced to use: 24 | 24 | 24
Characteristics for technology adoption

• Price, technology allowing flexible use and standard rather than extra functions matter when choosing new products

• The respondents thought they learnt new products easy and had no problems to keep up with technology development

• Environmental sustainability is important, especially for the oldest generation
Survey Study Conclusions – Similar to focus group study

• Perspectives are shared across generations rather than just within

• However, attitudes vary across generations as well, with significant differences regarding what kind of technology different generations would like to use to support active and healthy ageing as well as their reasons for using certain technology

• Contrary to previous literature, the three generations agree they learn technology easy and have no problem to keep up with the technical development
Study III – World Cafés

What are the reflections/opinions of older adults in different age cohorts, in Sweden and other EU countries, on the emerging findings from the project?

• Sweden x 3
• Latvia, Germany, Italy x 1 respectively

COVID-19 is challenging our planning here…..
GenerationTechC19 - In the light of COVID-19 (N=3000)

• Changes in ICT use? More than half, in all three generations, report increased use – highest proportion among people aged 70-79. Younger cohorts have a high use of ICT for shopping, but those 70-79 are mostly shopping IRL

• How is the usability of ICT perceived?

• Changes in attitudes to ICT?

• Characteristics for starting to use/accept digital technology…in the light of restrictions and recommendations related to COVID-19?

• Associations, perceptions, attitudes, age cohort and life satisfaction, experience of loneliness, social inclusion, participation and health?

• Gender differences?
Take home message

• Chronological age is not a denominator for attitudes to technology and technology acceptance

• Older people are not particularly concerned about learning new technologies

• Research from a generational perspective has the potential to deliver new knowledge to nurture strategies for learning and competence development regarding technology adoption and use among adults
Hälsojournalen poddradio

Välkommen till Hälsojournalen - Hemmets Journals egen podcast som drivs av vår hälsoredaktör Malin Gavelin.

I podden träffar hon specialister inom en rad olika områden och ställer i lugnt tempo alla de där -saker övert. Allt från övervikt till inkontinens och hjärtinfarkt.

Doro Sverige

den 7 november 2017


#ÅlderÄrBaraEnSiffra #SeniorSanningar

Collaboration with media and industry – for communication, learning and debate
Dagny Carlsson at the age of 105 years (today 108) – the world’s oldest blogger