

Ethical Issues of Digitalization and New Technologies

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Digital participation in old age

- Access to the Internet and the ability to use digital technologies are essential prerequisites for social participation in many areas of everyday life.
- Danger that older people will be excluded from this participation.
- Goal: Participation and empowerment through IT and assistive technologies, even in old age.
- General: Autonomy and empowerment of vulnerable persons and groups.
- Danger: One-sided protection and support can lead to paternalism and be experienced as humiliation and disrespect by those affected.

Access to Internet and AAL: A question of Justice

- Access to and use of digital offerings are unequally distributed within the group of older people.
- Significantly more unequally than between younger people
- Global inequality between developed and less developed countries
- Education
- Income and other resources
- Internet access and use of AAL by older migrants (they account a higher proportion of people with a low socioeconomic status)
- Barriers to use due to lack of or low knowledge of the language
- Experiences of exclusion and discrimination

- Distributive Justice
- Participatory justice
- Solidarity
- Fairness

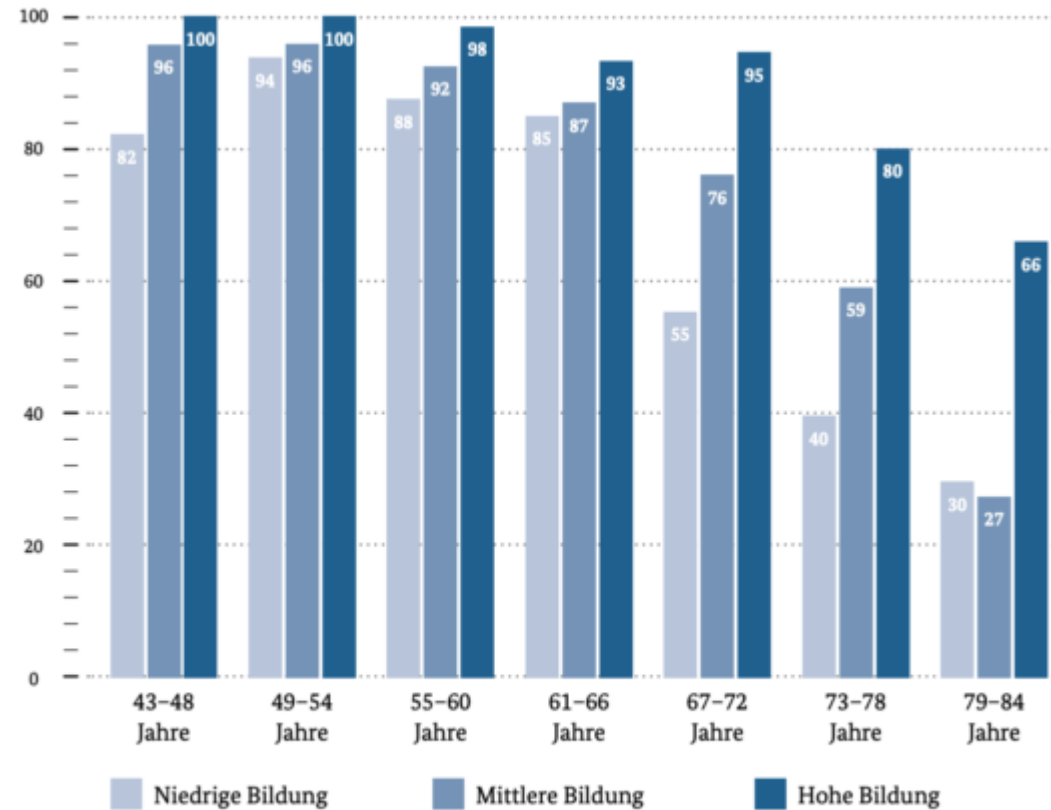


Abbildung: Anteil der Personen mit Zugang zum Internet nach Altersgruppen und Bildung (2017, in Prozent)

- Source: „Internetzugang und Internetnutzung in der zweiten Lebenshälfte“ - [CC-BY-NC-SA 2.0 Oliver Huxhold, Katrin Otte](#)

Ethical issues

- Low-barrier tools and offers
- Technical equipment in nursing homes and care facilities
- Internet in the public sphere and in public
- Free access to internet
- Assistive technology financing
- Deficit-oriented images of old age vs. resource-oriented images
- Vulnerability
- Persons with dementia: Involvement of other persons (legal representative)

- Empowerment: Strengthening competence in the use of IT and assistive technologies
- user-friendly products
- Older people should not have the impression that they are merely an anonymous user of digital technologies. Rather, they must be able to adapt the digital technologies to their needs and, if necessary, switch them off.
- There is a fundamental right not to use digital technology

Research Ethics

- Identification of conflicts of interest from the beginning of the development of technologies
- Involving later users in the development of new technologies
- Identifying personal needs and preferences of later users
- Research Ethics, Technology Ethics and Applied Ethics as mandatory components of the training program for engineers

- Acquiring digital skills and addressing the impact of the digital transformation on one's own area of work and on the lives of older people for Health Care Professionals.
- See: 8. Altersbericht (Age Report) des deutschen Bundesministeriums für Familie, Senioren, Frauen und Jugend (2020)

LICA



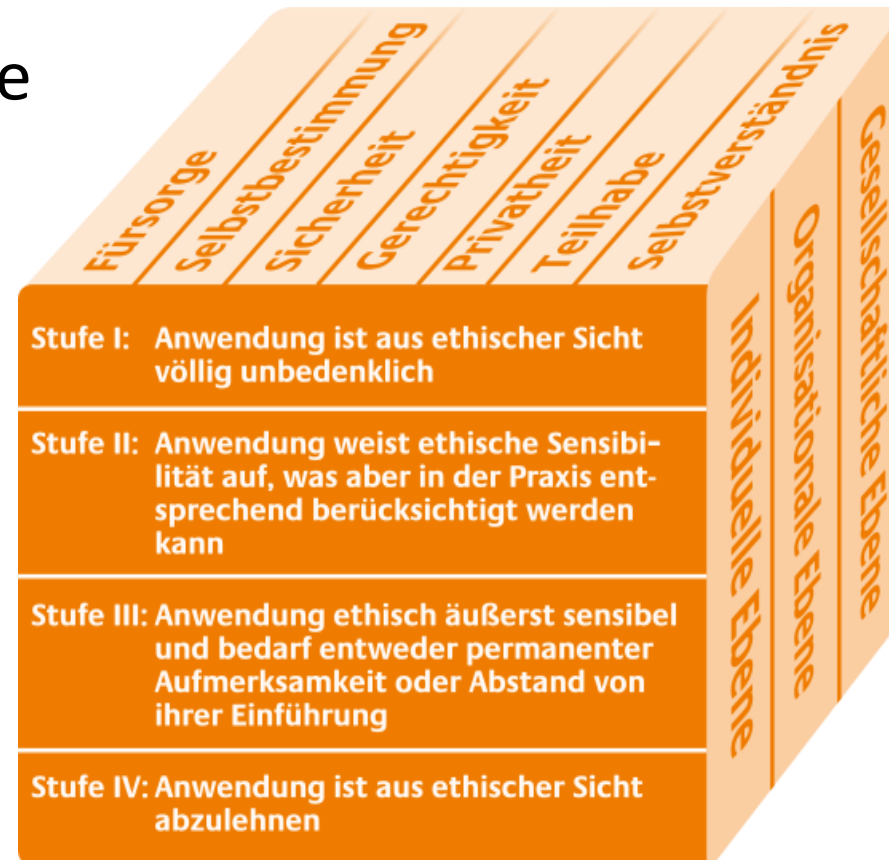
- LICA = Linked Care: Continuous information supply in mobile care and support
- Interdisciplinary project, 12 Partners + Advisory Board
- IERM: Research on ethical issues of LICA

- LICA offers access to information relevant to nursing and care across the boundaries of the different care settings and primarily supports nursing and caregivers in documentation. The possible interfaces to physician software and pharmacies and documents available in ELGA (= “Elektronische Lebenslange Gesundheitsakte” [electric lifelong health file]) help to avoid multiple entries.
- Objective: Developing practical IT tools for standardized networking in mobile care and nursing. Artificial intelligence provides both "intelligent" sensor data and, for example, recognizable status information for the target groups, and helps to control the responsive interface of the portal.
- The result will be an integrated, easy-to-use, well-connected IT system for care, therapy and patients themselves, which can be operated via mobile devices, PC or tablet, and which, when evaluated, shows clear improvements in integrated healthcare.

- From an ethical point of view, the project aims at empowering the clients in an innovative way by strengthening their self-determined everyday life as users of the new tool to be developed.
- At the same time, the focus is on the particular vulnerability of the clients, which has to be taken into account already during the recruitment of test persons (interface between care ethics and research ethics).
- From an ethical point of view, the goal must be a care summary that is kept as free as possible from moral or personal evaluations, which nevertheless points out, for example, deficiencies or hazardous situations that exist for the client. It is important to balance the principle of non-harm with the principle of benefit.
- In order to ensure that the ethical aspects mentioned above are applied throughout the entire project process, the discourse-ethical MEESTAR model is used.

MEESTAR (= Model for Ethical Evaluation of Socio-Technical Arrangements)

Arne Manzeschke
et al.



- **Level I:** Application is unobjectionable from an ethical point of view
- **Level II:** The application is ethically sensitive, but this can be taken into account in practice.
- **Level III:** Application is ethically extremely sensitive and requires either permanent attention or distance from its introduction.
- **Level IV:** Application is to be rejected from an ethical point of view.

Digital Sovereignty

Digital sovereignty = “self-determined, informed, secure and responsible appropriation and use of digital technologies”

(8. Altersbericht BMFSFJ, see above)



Thanks for your attention!