

Ethical Conflicts Regarding Technical Assistance Systems for the Elderly

S**Hartmut Remmers***University of Osnabrück, Germany***Saskia K. Nagel***University of Osnabrück, Germany*

INTRODUCTION

According to estimates from the World Health Organization from 2008, people aged over sixty will triple from 600 million in 2000 to two billion in 2050 (World Health Organization, 2008). The impact on family systems and social systems will be tremendous. Increased life expectancy comes along with increased rates of limited mobility, chronic disease, and multimorbidity. The demographic trends ask for a rethinking in health-care and homecare solutions. Rapid development of information and communication technologies aims to support older people, frequently in need of care that involves their relatives as well as professionals. The challenge is to improve quality of life in the ageing population. This is of utmost social relevance given debates about population pyramids, improvement of physical and mental health status, social security, pensions, to name just a few. Scenarios of social development, which not only pertain to increasing longevity, but also a diminishing concentration of availability of medical care services demand technological progress to be applied rapidly. One of the most relevant developments, technically equipped private homes for people, who are in need of care, is viewed as socially valuable. Such homes should allow a high level of independence in a familiar home environment, and thus, the quality of life, despite chronic illness or impairment, shall be guaranteed and enhanced.

BACKGROUND

Socially unequal circumstances of life and circumstances for older people justify to refer to a heterogeneity of ageing processes. This heterogeneity is a crucial

aspect to be considered in the debate of technological developments for the ageing population: Ageing is a highly individual process. The variance in what it means to get older is tremendous with respect to objective measures and subjective experiences. In particular, we face manifold coping strategies dependent upon varying biographical, economic, and social resources, which in turn effect the use of modern technologies. Every development of devices and every assessment of their usability must consider this variability to be able to satisfy the actual needs of the user.

From a gerontological point of view, the abilities of older people to maintain or recover independent, task-oriented and meaningful lives have been ascertained. These abilities enable them to live in an environment, which is stimulating, supportive, and encouraging of the autonomous confrontation with the challenging tasks and burdens of daily life (Kruse, 1996).

Therefore, assistive technologies cannot primarily be viewed as means to compensate for loss. Instead, we suggest considering the personal competence of older people in applying this technology purposefully and in their own authority in order to carry out the functions and aims of daily life. Even in cases of impaired abilities to lead an independent life and an increased need for care, it is essential to convey creative and even innovative potentials to ageing.

A critical examination of the image of old age, indicates, amongst others, the following: questions of acceptance and support of ageing are decidedly influenced by the central value system of society. This value system is subject to historical variability which is developing in the direction of individualization and pluralization, which has been repeatedly empirically confirmed since the 1970s (Beck & Beck-Gernsheim,

DOI: 10.4018/978-1-4666-5888-2.ch702

2002; Giddens, 1991; Baumann, 2001; Schroer, 2001; Ehrenberg, 1998).

Increased life expectancy and the growing access to high qualified health services let us expect a longer phase of personal independence, which is assumed to be supported by technological developments. Doubtlessly, there is a great demand for user-centered health-enabling and assistive technologies. One cannot overestimate the importance of assistive technologies as well as modern information and communication technologies in supporting older people in need of care. Literally, technologies have the potential to change lives if they are developed and employed sensitively. They can help older adults to compensate for their impairments and assist in the performance of daily activities. They could be used to assist in communication, they could serve to recognize accidents or fire, they can monitor medication intake and inform caregivers and clinicians about health status and development (Pollack, 2005). Thus, assistive technologies may enable older adults to remain living in their homes for longer, or being more independent in care facilities. This is an advantage for the seniors, and it saves money of institutionalization. The technologies are supposed to increase the autonomy, self-confidence, and mobility of older people. They can enhance security and under particular circumstances might also prevent social isolation. But the installation of assistive technologies implies also unforeseeable consequences.

IMPLEMENTING ASSISTIVE TECHNOLOGIES: HOPES AND RISKS

Maintaining Self-Determination

First scenario: An 85-year-old lady is restricted in her physical ability since receiving a hip prosthesis. Due to the prolonged anesthesia during surgery, her cognitive performance is restrained as well. Technical equipment of her apartment (security technologies for additional control of all kitchen appliances, doors, and windows) and the use of body-worn motion sensors (with integrated alarm system) enable her to lead a largely independent and self-determined life.

Hopes

Self-determination can be understood as main motivation for developing and employing assistive technologies: It is the central normative legitimating background for the introduction of assistive technologies in the home environment. Nevertheless, the extent of how much technical assistance systems can recover and maintain high levels of independence and security must be seen in relation to potential adverse psychophysical effects, as well as a possibly unacceptable loss of privacy and intimacy.

The idea of self-determination as understood in ethics has its roots in the historically rich and multi-faceted term “human dignity.” This is a concept that assumes humans have and should have control over their own actions. The concept of dignity, dominated by Judeo-Christian and Kantian traditions, has been serving as a central norm in continental Europe, with tremendous impact on law and ethics (Debes, 2009; Malpas & Lickiss, 2007; Whitman, 2004). *Self-determination* presents a basic right on a normative level. Nevertheless, it needs to be acquired on a genealogical level. In this respect, self-determination is linked to the biographical development of personal abilities under the protection of the corresponding social institutions responsible for them.

The need to enlist the help of others presents a basic human situation. It is not possible for any human to lead a self-determined, independent life without having experienced once in their lifetime help, support, and aid (Kruse, 2005a, 2005b). Reciprocal dependencies are a part of social existence for human beings. Physical dependency and social reliance are anthropological facts. Humans are born unfinished and remain dependent on assistance, attention, and recognition their whole lives. In modern society, independence is a highly valued but at the same time fragile commodity. Developmental psychological views suggest that competently using the right to self-determination depends upon an additional personal ability: the ability to attribute meaning, not only to life, but also to specific actions and experiences. Considering high age, one must ask: Is this ability endangered by an increase in loss of independence?

7 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/ethical-conflicts-regarding-technical-assistance-systems-for-the-elderly/112411

Related Content

A Fuzzy Knowledge Based Fault Tolerance Mechanism for Wireless Sensor Networks

Sasmita Acharya and C. R. Tripathy (2018). *International Journal of Rough Sets and Data Analysis* (pp. 99-116).

www.irma-international.org/article/a-fuzzy-knowledge-based-fault-tolerance-mechanism-for-wireless-sensor-networks/190893

Inertial Measurement Units in Gait and Sport Motion Analysis

Braveena K. Santhiranayagam, XiaoChen Wei, Daniel T. H. Lai and Rezaul K. Begg (2015). *Encyclopedia of Information Science and Technology, Third Edition* (pp. 6892-6904).

www.irma-international.org/chapter/inertial-measurement-units-in-gait-and-sport-motion-analysis/113157

IT Governance

Hans P. Borgman (2015). *Encyclopedia of Information Science and Technology, Third Edition* (pp. 2745-2753).

www.irma-international.org/chapter/it-governance/112693

EEG Analysis of Imagined Speech

Sadaf Iqbal, Muhammed Shanir P.P., Yusuf Uzzaman Khan and Omar Farooq (2016). *International Journal of Rough Sets and Data Analysis* (pp. 32-44).

www.irma-international.org/article/eeg-analysis-of-imagined-speech/150463

Hindi Text Document Classification System Using SVM and Fuzzy: A Survey

Shalini Puri and Satya Prakash Singh (2018). *International Journal of Rough Sets and Data Analysis* (pp. 1-31).

www.irma-international.org/article/hindi-text-document-classification-system-using-svm-and-fuzzy/214966