# Constructing Third Age eHealth Consumers by Using Personas from a Cultural Age Perspective

Maria Ekström¹ and Eugène Loos²(⊠)

<sup>1</sup> Laurea University of Applied Sciences, Metsänpojankuja 3, FIN-02130 Espoo, Finland

maria.ekstrom@laurea.fi

University of Amsterdam, Nieuwe Achtergracht 166, 1018 WV Amsterdam, The Netherlands

e.f.loos@uva.nl

Abstract. Society ages and our already extensive use of a host of different portable devices continues to expand. No leap of the imagination is needed to grasp that an exponential growth of the eHealth market is at hand. While the ageing of the baby boomers will have an impact on the global economy as a whole, of particular interest is the impact this will have within the context of eHealth market development. We wish to clarify and raise the level of awareness about how older age identity is constructed in the marketer-consumer dialectic within the eHealth context and how the personas method can be used from a cultural age perspective. Our focus is on the process of third agers becoming eHealth consumers. We present an analytical framework for future studies aiming to analyze eHealth offerings. This will allow us to gain insight into the process of constructing the third age eHealth consumer group's identity through multimodal communicative acts, as is the case in advertising, or in settings requiring interactivity, such as the service design process. It is through these multimodal acts that new eHealth offerings could be marketed to the third age eHealth consumer, focusing especially on both the written and visual language used. Our approach is meant to offer an alternative to studies in which ageing has mostly drawn upon the chronological age concept and where marketing has not been seen as a discursive practice shaping consumers' identities.

**Keywords:** eHealth  $\cdot$  Services  $\cdot$  Third age eHealth consumers  $\cdot$  Personas  $\cdot$  Cultural age

#### 1 Introduction

Western societies today have more older people than ever before. The question is: how can these societies cope with the challenges of this growing number of people who are very likely also to require care and support? One answer is to create solutions for "aging in place" (Rodeschini [1, p. 521]), which refers to the ability of older people to remain living in their homes for as long as possible, through the use of various technologies. Rodeschini [1] makes a distinction between AT and ICT, drawing on research

DOI: 10.1007/978-3-319-20892-3\_4

<sup>©</sup> Springer International Publishing Switzerland 2015

J. Zhou and G. Salvendy (Eds.): ITAP 2015, Part I, LNCS 9193, pp. 35-43, 2015.

by e.g. Blaschke et al. [2]. Whereas AT (Assistive Technologies) is mainly about health monitoring, ICT (Information and Communication Technologies) is more about communicating and informing [2, p. 523], e.g. the Whatsapp users who designed a quiz that demanded that users change their profile picture whenever they gave a wrong answer is a case in point - the technology was already there, but the users themselves designed the use. For this paper, we concentrate more on ICT than on AT; the focus of our analytical framework is on the encounter between third age consumers (see Sect. 5 for a clarification of this concept) and the eHealth providers and designers.

In our approach, we build on the personas method that was introduced by Cooper [3] in 1999 within the context of software design. The personas approach is usually aimed at finding a typical average user: "Creating personas involves identifying the critical behavior patterns and turning them into a set of useful characterizations" (Goodwin [4, p. 242]). According to Goodwin, personas can, but are not required, to be created with the help of demographics, unlike the use of segmentation techniques, which in most cases are based on demographic criteria. In our opinion, the personas method certainly has advantages, although the use of chronological age as an age variable is problematic, as this might invoke stereotyping effects (see e.g. Turner and Turner [5] who argue that stereotyping is highly prevalent). To avoid this risk of stereotyping, we use the concept of cultural age, which refers to the way a person experiences her or his age (in contrast to cognitive age, a concept introduced by Barak and Schiffman [6] in 1981 referring to a person's self-perceived age (feel-age, look-age, do-age, and interest-age).

Hence the cultural age concept addresses the issue of stereotyping and puts forward the dialectic that is always present when something is designed for or with a user group. The aim is also to find more viable, sustainable solutions in accordance with this (see also [7]). This is important because there will probably be an exponential growth of the eHealth market, where eHealth providers and designers, as well as older users, will meet to create new better solutions through the use of different, existing tools. Note that, although we refer here to a 'market', we are well aware that the size of any market is not easily measurable, but must necessarily be estimated by using various statistical data. Paul Sonnier, a famous social entrepreneur (http://storyofdigitalhealth.com/about/), addresses this issue by pointing out that the digital health market is not monolithic and has to be parsed with information from different sources (personal communication, September, 20, 2014).

The growth of this market is coupled with the ageing of our society, as well as the extensive use of different portable devices. From an ICT-perspective, it is important to note that there is an average growth of 9.9 % in health-related use of the internet in, for example, Denmark, Germany, Greece, Latvia, Norway, Poland and Portugal (according to the results of an extensive survey conducted in 2005 and 2007 [8]). At the same time, something called mhealth has also emerged, which puts a different light on the consumer's role. Akter and Ray [9] emphasize how a consumer perspective on mhealth services could be an important factor in creating possible business growth through

We will use eHealth throughout our paper to describe the new services that are relying on ICT even if we include portable devices.

scalability. Focusing on consumer needs is important in the process of empowerment and when creating sustainable solutions [9, p. 79]. Affordability, availability, awareness and acceptance are major concepts when creating mhealth services [9].

### 2 Awareness About Constructing Older Age Identity in the Marketer-Consumer Dialectic in an EHealth Setting

Whitten, Steinfield and Hellmich [10] have presented the "21st century health care consumers" as an important driving force in the development of eHealth. In this paper, we will scrutinize the role of the consumer [11, 12], and especially that of the ageing consumer, within this context. We use the definition of eHealth suggested by Eng [13]: "e-health is the use of emerging information and communications technology, especially the Internet, to improve or enable health and healthcare", but have expanded this to include a consumer perspective. We also wish to emphasize that we treat markets as scripts, i.e., eHealth markets do not exist as such, but are born in different encounters between providers and consumers (in other words, the market is socially constructed; see further Storbacka and Nenonen [14]. According to consumer culture theory (see e.g. Arnould and Thompson [15]), the various different kinds of consumers do not exist without the encounter, or as Caruana and Crane [16, p. 1498] phrased it: "Consumer culture theory assumes consumers do not (pre-) exist 'out there' as homogenous, a priori categories." Markets are in this sense a social construction, emerging through discursive practices. In these encounters the role of the older consumer and how she or he will be identified is important. One basic problem is that marketing practitioners often use the chronological age concept to identify consumers. The chronological age concept [17– 19] easily gives a too static view of a consumer and her or his actions. Marketers often do not take into account the diversity in the older age group [20]. According to Rodeschi [1, p. 524], in the development of new technology with or for older people, the dynamics in the relationship between older people and technology should be more critically examined. Rodeschini also points out that it is important to focus on ageing.

With the following quote, we attempt to clarify our approach: "Consumer culture theorists have turned attention to the relationship between consumers' identity projects and the structuring influence of the marketplace, arguing that the market produces certain kinds of consumer positions that consumers can choose to inhabit. While individuals can and do pursue personally edifying goals through these consumer positions, they are enacting and personalizing cultural scripts that align their identities with the structural imperatives of a consumer-driven global economy" [21, p. 871].

In the following, we will discuss the chronological age concept that we see as problematic when designing eHealth services for and with older people, as well as in the use of personas.

## 3 Contesting the Chronological Age Concept

As mentioned above, we feel that the chronological age concept is a problematic one. Additionally, in our view, markets are born in specific encounters between, for example, consumers, eHealth providers and designers. To understand how the third age

eHealth consumer (see Sect. 5) will be constructed in such encounters, we need another way of understanding these older people, in order to avoid being overly influenced by the chronological age concept as discussed in the previous section. So, on the one hand, a more dynamic view of ageing is important. But on the other hand, chronological age is an important concept for most of us. We define, categorize and position ourselves in relation to others on the basis of the magical numbers telling us how long we have been walking on earth. Chronological age is in fact as important a dimension of categorizing people as race and gender [22]. Knowledge of the chronological age provides information about the possibilities of accomplishing certain goals. The possibilities for becoming a world famous opera singer at the age of 50 are different from those at the age of 25. But what makes this age concept problematic is that it is often presented as a fact, or as an independent social category [23]. If consumers are defined on the basis of their chronological age alone, this gives rise to the notion that a person and her or his abilities are definable by her or his age. However, in everyday life, age is created and recreated when interacting and communicating with other people. In this we follow Nikander, who states: "(...) the focus in the current work is exclusively on the communicative and dialogic processes in and through which situational meanings of age and ageing emerge in interaction" [23, p. 13].

We also follow Mathur and Moschis [24], who emphasize processes where adults learn roles and norms connected to older age. To create more dynamic eHealth solutions, we suggest that these roles and norms be made visible. We also submit that the consumer's identity is created through discursive practices, which are materialized in advertising, for example. We do not want to see the older consumer as passive and the marketing practitioner as active, as presented by Bristor and Fischer [25]. We feel that marketing is a practice that shapes roles, identities and norms, a view that is similar to the thoughts of Hackley [26–28], Penaloza and Gilly [29], Hänninen [30] and Puustinen [31]. We want to ameliorate the communicative literacy [32] among older consumers as well as among eHealth providers and designers creating different eHealth services.

We define reality as socially constructed, and hence research in this field and our contribution to the discussion about older consumers in this field should be seen as a social construction. The much-used monolithic approach, in which consumers are described using the chronological age concept, has not been conducive to a dynamic discussion. Our aim is to create a more vivid discussion leading to a more dynamic way of seeing older people.

#### 4 A Cultural Perspective on Age and Identity

Our contemporary society is increasingly defined by consumption. It has even been stated that we define ourselves through consumption of different products and services. Arnould and Thompson [15, p. 868] have analyzed so-called consumer identity projects and related these to consumption through which consumers both create and search for an identity. When identity is seen from this perspective, brands are mostly involved: people use certain brands to strengthen a desired identity. We wish to emphasize how the discursive practices of practitioners create frameworks of interpretation in which

older people find their identity. Hence we are not talking about identity projects that use brands to underline a consumer's identity, but rather about how discursive practices shape the way consumers find their identity.

While Katz [21] talks about cultural ageing, we would like to introduce the concept of cultural age, as analogous to the concept of chronological age. The difference here is that we emphasize how age is constructed through representation and interaction. The concept is to gender what chronological age is to sex (see the discussion about the concepts in Rubin [33]). Gender is defined as the way the masculine or the feminine role is constructed in different discursive practices; sex has to do with the visual biological differences between a man and a woman. By analogy, we all have a chronological age, but also a cultural age by which our identities are shaped as old or young in interaction with each other.

#### 5 The Combination of Older Age and Consumption

To illustrate our perspective on the role of older people in the design process of eHealth services, we provide an example taken from a consumption context. Until recently, older people were not regarded as an interesting consumer segment. One of the reasons for this was that they were seen as consumers with traditional consumption patterns (see e.g. Suokannas [19]). This situation has changed, mainly because marketers have begun to be convinced that this segment is valuable. The baby boomers who changed society in the past [34] are now having a similar effect in the marketing context. This has led to a wholly different idea of who the future older consumers will be: "The little old lady of 2025 won't have a spotless Ford Fairlane (that she drives once a week, to church) sitting in her garage, She'll be buzzing around town in an Alfa-Romeo (standard equipment with hydraulic lifts), dressed head to toe in the Nike "Silver" line, parking in the plentiful spaces reserved for people who are old but not impaired (as mandated by the 2009 Perky Aging Americans Act). Thanks to improved health care, nutrition, fitness and cosmetic surgery, at seventy she'll look and feel like her mother did at fifty" ([35], pp. 129–130).

This quote emphasizes the differences between the way older people of the future are expected to look and act, and the older people we have been used to. However, while this may hold true for third age [36], i.e., those who are healthy (and often rich enough) to be marketed as a valuable consumer segment to marketers, obviously this will not apply to the category of older people who are not as fortunate (see Loos [17] for two discourse coalitions related to these two kind of older people: the eternally youthful seniors and the frail needy seniors, and see Suokannas [19] and Loos and Ekström [20] on other possible categorizations of older people).

In this paper we focus on older people who are in their third age and on how their identity as active eHealth consumers is constructed (by themselves and others, such as eHealth providers and designers). In other words, we want to understand the process of becoming a third age eHealth consumer. We therefore present an analytical framework for future studies aiming to analyze eHealth offerings and to gain insight into the construction of the third age eHealth consumer group's identity through multimodal communicative acts as is the case in advertising or in settings requiring interactivity,

such as the service design process. These multimodal acts could be the way new eHealth offerings are marketed to the third age eHealth consumer, focusing especially on both the textual and visual language in use. Our approach is meant to offer an alternative to studies in which ageing has mostly drawn upon the chronological age concept and where marketing has not been seen as a discursive practice shaping consumers' identities (see also Loos and Ekström [20]). As these markets develop, it is important to raise the awareness of age stereotypes, confront possible ageism in society and to develop communicative acts of high ethical standards. By using and elaborating on the Foucauldian "technologies of the self" (Foucault [37] - in other words, by making visible the ways older people are constrained or empowered in our society - we aim to find a means to reach our goal.

### 6 Towards the Use of Personas for the Design of EHealth Services for Third Age Consumers

Within the emerging field of eHealth services, it is important to find out how the dynamic dialectic between the ageing discourse and the eHealth discourse, as discussed in this paper, will construct the third age eHealth consumer. To that end, we proposed to use a specific method called personas creation [3, 38]. In the past, personas have largely been used to derive a more hands-on impression of users within product or service design. We propose to use personas for eliciting the various power relations and the dynamics of specific encounters in which the third age eHealth consumer is constructed. To our knowledge, this method has mainly been used to create fictive personas. The use of personas as a method may enable a better understanding among eHealth providers and designers of the third age eHealth consumer, although care should be taken to avoid the risk of creating stereotypes. This might occur if designers allow themselves to be led by the chronological age concept. We recommend scholars, marketers, eHealth providers and designers in this field to further develop this method by adopting our cultural age concept in order to avoid too much stereotyped categorization. As personas are archetypes and the aim is to develop these distinct types,

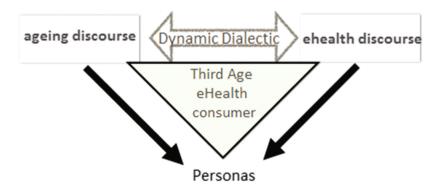


Fig. 1. Constructing the third age eHealth consumer

stereotyped categorization can easily occur (see Sect. 1 and [3, 38]). Although personas are used to create a deeper connection with the user by narratives, the hypothetical persona is described through the use of chronological age. In other words, eHealth providers and designers are creating offerings that are informed by this age concept. By focusing on how age is constructed and making use of the cultural age concept, personas can be created in a more realistic way.

In Fig. 1, we finally visualize how the third age eHealth consumer will be constructed in the dynamic dialectic between the ageing discourse and the eHealth discourse, in relation to the creation of personas. As explained in this paper, this process will take place in specific encounters between third age eHealth consumers, providers and designers.

#### References

- Rodeschini, G.: Gerotechnology: a new kind of care for aging? An analysis of the relationship between older people and technology. Nurs. Health Sci. 13(4), 521–528 (2011)
- 2. Blaschke, C.M., Freddolino, P.P., Mullen, E.E.: Ageing and technology: a review of the research literature. Brit. J. Soc. Work **39**(4), 641–656 (2009)
- 3. Cooper, A.: The Inmates are Running the Asylum: Why High-Tech Products Drive us Crazy and How to Restore the Sanity, vol. 261. Sams Publishing, Indianapolis (1999)
- 4. Goodwin, K.: Designing for the Digital Age: How to Create Human-Centered Products and Services. Wiley, New York (2011)
- 5. Turner, P., Turner, S.: Is stereotyping inevitable when designing with personas? Des. Stud. **32**(1), 30–44 (2011)
- Barak, B., Schiffman, L.G.: Cognitive age: a nonchronological age variable. In: Monroe, K. B. (ed.) Advances in Consumer Research, vol. 9, pp. 602–606. Association for Consumer Research, Washington (1981)
- LeRouge, C., Ma, J., Sneha, S., Tolle, K.: User profiles and personas in the design and development of consumer health technologies. Int. J. Med. Inf. 82(11), e251–e268 (2013)
- 8. Kummervold, P.E., Chronaki, C.E., Lausen, B., Prokosch, H.-U., Rasmussen, J., Santana, S., Staniszewski, A., Wangberg, S.C.: eHealth trends in Europe 2005–2007: a population-based survey. J. Med. Internet Res. 10(4), e42 (2008). doi:10.2196/jmir.1023
- 9. Akter, S., Ray, P.: mHealth-an ultimate platform to serve the unserved. Yearb Med. Inform. **2010**, 94–100 (2010)
- Whitten, P., Steinfield, C., Hellmich, S.: eHealth: market potential and business strategies.
  J. Comput. Mediated Commun. 6(4). http://onlinelibrary.wiley.com/doi/10.1111/j.1083-6101.2001.tb00129.x/fulln (2001). Accessed 21 Jan 2015
- 11. Keränen, N., Pulkkinen, P., Jämsä, T., Reponen, J.: Drivers of the eHealth transformation: beyond age and BMI. Finnish J. eHealth eWelfare 5(4), 180–188 (2013)
- Simon, F., Meurgey, F.M.: New strategies for digital health. http://www.marketing-trendscongress.com/archives/2014/pages/PDF/317.pdf. Accessed 21 Jan 2015
- 13. Eng, T.: The e-Health Landscape A Terrain Map of Emerging Information and Communication Technologies in Health and Health Care. The Robert Wood Johnson Foundation, Princeton (2004)
- 14. Storbacka, K., Nenonen, S.: Markets as configurations. Eur. J. Mark. **45**(1/2), 241–258 (2011)

- Arnould, E.J., Thompson, C.J.: Consumer culture theory (CCT): twenty years of research.
  J. Consum. Res. Gainesville 31(4), 868–882 (2005)
- Caruana, R., Crane, A.: Constructing consumer responsibility: exploring the role of corporate communications. Organ. Stud. 29(12), 1495–1519 (2008)
- 17. Loos, E.F.: Senior citizens: digital immigrants in their own country? Observatorio (OBS\*) J. 6(1), 1–23 (2012)
- 18. Loos, E.F.: Designing for dynamic diversity: representing various senior citizens in digital information sources. Observatorio (OBS\*) J. 7(1), 21–45 (2013)
- 19. Suokannas, M.: Den anonyma seniorkomsumenten identifieras. Om identitetsskapande processer i en marknadsföringskontext [Identifying the anonymous senior consumer: The processes creating elderly identities within a marketing context]. Dissertation, Economics and Society, Swedish School of Economics and Business Administration Helsinki, Finland (2008)
- Loos, E.F., Ekström, M.: Visually representing the generation of older consumers as a diverse audience: towards a multidimensional market segmentation typology. Participations 11(2), 258–273 (2014)
- Katz, S.: Cultural Aging, Life Course, Lifestyle, and Senior Worlds. Broadview Press, Peterborough (2005)
- 22. Kunda, Z.: Social Cognition: Making Sense of People. MIT Press, Cambridge (1999)
- 23. Nikander, P.: Age in Action Membership Work and Stage of Life Categories in Talk. The Finnish Academy of Science and Letters, Helsinki (2002)
- Mathur, A., Moschis, G.P.: Socialization influences on preparation for later life. J. Mark. Pract. 5(6/7/8), 163–176 (1999)
- 25. Bristor, J.M., Fischer, E.: Feminist thought: implications for consumer research. J. Consum. Res. Gainesville **19**(4), 518–536 (1993)
- Hackley, C.E.: Social constructionism and research in marketing and advertising. Qual. Mark. Res. 1(3), 125–131 (1998)
- 27. Hackley, C.E.: An epistemological odyssey: towards social construction of the advertising process. J. Mark. Commun. **5**(3), 157–168 (1999)
- 28. Hackley, C.E.: Marketing and Social Construction: Exploring the Rhetorics of Managed Consumption. Routledge, London (2001)
- Penaloza, L., Gilly, M.C.: Marketer acculturation: the changer and the changed. J. Mark. 63 (3), 84–104 (1999)
- Hänninen, S.: Sukupuoli laihdutustuotemainonnassa. In: Eriksson, P., et al. (eds.) Gender and Organisations in Flux?, pp. 229–240. Swedish School of Economics and Business Administration, Helsingfors (2004)
- Puustinen, L.: Kuvitteellisen kohderyhmän metsästys: Miten kuluttajuutta rakennetaan mainonnan tuotannossa? In: Eriksson, P., et al. (eds.) Gender and Organisations in Flux?, pp. 203–215. Swedish School of Economics and Business Administration, Helsingfors (2004)
- 32. Firat, A.F., Dholakia, N.: Theortical and philosophical implications of postmodern debates: some challenges to modern marketing. Mark. Theor. **6**(2), 123–162 (2006)
- 33. Rubin, G.: The traffic in women: notes on the 'political economy' of sex. In: Reiter, R. (ed.) Toward an Anthropology of Women, pp. 157–210. Monthly Review Press, New York (1975)
- 34. Dychtwald, K.: Age Power How the 21st Century will be Ruled by the New Old. Tarcher/Putnam, New York (1999)
- 35. Underhill, P.: Why We Buy: The Science of Shopping. Simon and Schuster, New York (1999)

- 36. Laslett, P.: A Fresh Map of Life. The Emergence of the Third Age. Harvard University Press, Cambridge (1991)
- 37. Foucault, M.: Ethics: subjectivity and truth. Robert Hurley and others. In: Rabinow, P. (ed.) Essential Works of Foucault 1954–1984, vol. 1. Pinguin Press, London (1997)
- 38. Adlin, T., Pruitt, J.: The Essential Persona Lifecycle: Your Guide to Building and Using Personas. Morgan Kaufmann, Amsterdam (2010)