Comprehensive Gerontological Development: A Positive View on Aging

Gerontology & Geriatric Medicine Volume 2: 1-6 © The Author(s) 2016 Reprints and permissions: sagepub.com/journalsPermissions.nav DOI: 10.1177/2333721416667842 ggm.sagepub.com



María de la Luz Martínez-Maldonado, PhD¹, Marissa Vivaldo-Martínez, BA¹, and Víctor Manuel Mendoza-Núñez, PhD¹

Abstract

Human aging can only be understood within its social and historical contexts. It is largely determined by the complex interrelation of biological, cultural, social, political, and economic factors. Furthermore, the phenomenon of population aging can be considered as a social and economic burden or as an invaluable social asset if understood within the perspective of the enormous potential of our aging populations. This article is based on the tenet that aging can be an enriching and productive stage marked by a lifelong process of personal growth and development. That is, in our perspective, ageing should become a process oriented toward the improvement and promotion of the individual's physical, psychological, and social potentialities to achieve the highest quality of life. The purpose of this article is to introduce the concept and practice of Comprehensive Gerontological Development that underlie current research at the Gerontological Research Unit of the Zaragoza Campus of the National Autonomous University of Mexico.

Keywords

positive ageing, social capital, comprehensive gerontological development, active aging

Manuscript received: April 5, 2016; final revision received: June 25, 2016; accepted: August 9, 2016.

Introduction

Human ageing is a complex, multifaceted process not limited to cellular aging but influenced by a myriad of factors far beyond the biological sphere. Its analysis and understanding cannot be circumscribed to chronological changes in the individual. As noted by Leonard Hayflick (1999), "It is not the mere passage of time; but the manifestation of biological events that occur during a period of time, which defines aging . . . [it] occurs over time, but not because of the passage of time" (p. 50).

According to statistical data for Mexico, in 2014, the population in the group of 60 years old and above was 11.7 million (9.7% of the total population), and the average expected life span at 60 was 22 years (Instituto Nacional de Estadística y Geografía, 2014). Such panorama depicts a country integrated by an increasing number of older adults and underscores the importance of the enforcement of national strategies addressed toward the well-being of this vast segment of our population. Furthermore, it stresses the emergent need to promote wide-scope multidisciplinary research in the field to provide adequate decision making.

The National Autonomous University of Mexico (UNAM by its Spanish acronym), launched in the late

1990s an institutional research program on Gerontology at its School for Graduate Studies Zaragoza, in Mexico City. Our Gerontology Research Unit (GRU) has developed a multidisciplinary approach to the study of ageing and is integrated by specialists in the fields of medicine, nursery, biological sciences, social sciences, and Humanities. Its aim is to promote a comprehensive approach to the study and understanding of ageing in Mexico to provide sound scientific research data that could be relevant to the decision-making process underlying policies for this vast segment of our population. Among its main priorities, the GRU has launched a Gerontological Model of Community Intervention addressed toward urban and rural sectors of our country. It encompasses research on clinical biochemistry, cognitive development, nutrition, and education, and it has

¹Universidad Nacional Autónoma de México, México City, México

Corresponding Author:

Víctor Manuel Mendoza-Núñez, Unidad de Investigación en Gerontología, Facultad de Estudios Superiores Zaragoza, Universidad Nacional Autónoma de México, Guelatao Nº 66, Col. Ejército de Oriente, 09230 México City, México. Email: mendovic@unam.mx

Creative Commons Non Commercial CC-BY-NC: This article is distributed under the terms of the Creative Commons (cc) (i) (S) Attribution-NonCommercial 3.0 License (http://www.creativecommons.org/licenses/by-nc/3.0/) which permits noncommercial use, reproduction and distribution of the work without further permission provided the original work is attributed as specified on the SAGE and Open Access pages (https://us.sagepub.com/en-us/nam/open-access-at-sage).

recently launched an innovative BA Program in Ageing and Community Development.

As to our conceptualization of ageing, the group of scholars at the GRU endorses multifaceted interdisciplinary definition of human aging in the following terms:

Ageing can be considered a gradual and adaptive process, characterized by a relative decrease in the biological reserve of the individual and in his/her capacity to maintain or restore homeostasis. It is associated to morphological, physiological, biochemical, psychological, and social changes that may be prompted by genetic factors as well as by the accumulated wear off of the organism resulting from the vast number of challenges that a person faces throughout his/her life within a given environment. (Mendoza-Núñez, 2013, p. 164)

On the contrary, and for pragmatic purposes, we have established the onset of ageing on the fifth decade of life, approximately around 45 years (Mendoza-Núñez, Martínez-Maldonado, & Vivaldo-Martínez, 2016). However, we acknowledge the fact that such a threshold may be considered arbitrary because the perspective about ageing in science is undoubtedly associated to changes in life expectancy estimates.

Approaches to the Study of Aging

The issue of aging and old age has undergone scientific research and philosophical reflection since ancient times. Throughout history, two major points of view outstand from which diverse interpretations have been derived. According to the first, old age is a stage of life in which the benefit of experience prevails, whereas the second regards old age as a loss, even considered synonymous with disease, that is, the aging person is mainly viewed as a passive agent, excluded from social and labor scenarios (Vivaldo-Martínez, 2008).

Although at the end of life, a high percentage of older people have chronic health problems, current statistical data indicate that the percentage of fragile, unhealthy older persons is lower than 15% of those aged above 65 years, thus contradicting the medicalized perspective on aging (Fernández-Ballesteros et al., 2010; Johnson, Mossakowski, & Hill, 2011; Rodriguez-Mañas & Fried, 2015). Accordingly, it is important to promote inclusive initiatives based on the strengths inherent in the remaining percentage of older people (more than 80%) who may continue to contribute significantly to the development of their communities (Chatterji, Byles, & Cutler, 2015; Mendoza-Núñez, Martínez-Maldonado, & Correa-Muñoz, 2009).

At present, the study of aging is mainly oriented by disciplinary approaches. From a medical perspective, an emphasis is made on deterioration, loss, and illness (Shroufi, Chowdhury, & Aston, 2011). The older person tends to be perceived as a confluence of deteriorated organs, systems, and diseases. Personal, cultural, social, historical, and geographical contexts tend to be disregarded (Brüssow, 2013; Cho, Martin, & Poon, 2015; Johnson, Mossakowski, & Hill, 2011; Niebrój, 2006). This perspective centers on a reductionist approach in which a human being is seen essentially as a set of organs composed of cells whose wearing processes determine the appearance of pathologies (Goldsmith, 2014; Sergiev, Dontsova, & Berezkin, 2015). Within the medical perspective, one of the best-known proposals in the classification of forms of aging is that of Rowe and Kahn (1987). According to them, successful agers show physical changes inherent to the ageing process in the absence of chronic illnesses or limitations in physical or cognitive functionality while persons with usual aging depict changes associated to the aging process together with chronic illnesses or physical or cognitive limitations. Furthermore, a related concept within this framework is that of "frailty" defined as a "clinically recognizable state of increased vulnerability, resulting from aging-associated decline in reserve and function across multiple physiologic systems such that the ability to cope with everyday or acute stressors is compromised" (Xue, 2011, p. 1). The medical perspective has traditionally underpinned public care policies, sometimes leading to discriminatory practices in the social and health care systems, through the promotion of biased, non-inclusive, welfare programs.

A second group of theories has been developed within psychology and sociology such as decoupling, disengagement or withdrawal, activity, social roles, stratification by age, continuity, and subculture, among others (North & Fiske, 2012). They are theories that have a large body of research, from which policies and institutional practices, aimed to control the perceptions, attitudes, and practices of the aging individuals. As a result, paternalistic health and social care programs are promoted which prevent their social involvement in community decision making.

Another related disciplinary field is that of Gerontology. It is a broad discipline, which encompasses psychological, biological, and social analyses of ageing (Powell & Biggs, 2003). The biomedical study of ageing has dominated the disciplinary development of Gerontology. Nevertheless, while Gerontology is certainly influenced by medical science, its scope is much broader by definition (Powell & Biggs, 2003). In our opinion, a reorientation of Gerontology is necessary beyond the search for general theories that homogenize aging and old age toward the construction of explanations that take into consideration different forms of aging. The objective would be to guarantee the successful integration of old people into society through the promotion of social networking, cognitive stimulation, and the enforcement of a sense of self-worth in the individual (Alwin, 2012; Price & Tinker, 2014). Such a reorientation is associated with theories centered on the role of social determinants such as race, social class, gender, education, and religion on the construction of different forms of ageing. In the Second World Assembly on Ageing, held in Madrid in 2002, the relevance of active aging was highlighted as a key strategy for achieving the maximum health,

well-being, and quality of life of older adults, defining it as "the process of optimizing opportunities for health, participation, and security to enhance quality of life as people age." Active aging refers to the empowerment of older persons in biological, psychological, and social areas, understanding empowerment as the individual's self-promotion, independence, and self-confidence, as well as his or her right to a dignified way of life according to self-imposed values, the ability to stand up for one's own rights, and to be free (United Nations, 2002).

A theoretical approach in such direction is feminist gerontology. According to Freixas, Luque, and Reina (2012),

Feminist gerontology research attempts to document the experiences of elderly women and to promote new interpretations of female aging. Among its basis goals is that of enabling and empowering this population revealing the unequal social regulations that mark the lives of elderly woman. (p. 46)

It raises the importance of emancipatory social change and of providing alternatives to transform social reality. The experience of aging people is considered of utmost importance and gender differences in ageing are underscored regarding social, cultural, and professional factors that older men and women have experienced throughout their lives (Freixas et al., 2012). Moreover, from this theoretical perspective, it is essential to recognize the diversity and plurality that exist among older people. Different life histories are associated with radical differences in the ways people age, thus being essential to consider subjectivity, to improve human conditions, to promote community development, and to strengthen the ecosystems in which people and communities are immersed, in particular, the aging population (Dannefer & Daub, 2009).

Social Capital and Aging

Given the impending scenario of a demographically aged world, a consensus has been reached on the importance of studying the institutional, cultural, and social factors that enable or prevent access to good life-quality conditions for ageing populations. In such regard, it is essential to develop theoretical and methodological perspectives that could examine critically current social perceptions of ageing. The revision of prevailing models and the development of more comprehensive approaches to the understanding of ageing must involve a vast interdisciplinary effort anchored in the consideration of historical, social, political, and economic contexts. Such an approach would involve analyzing aging and old age as a form of social capital. In Bourdieu's terms, social capital refers to "the sum of the resources, actual or virtual, that accrue to an individual or a group by virtue of possessing a durable network of more or less institutionalized relationships of mutual acquaintance and recognition" (Bourdieu & Wacquant, 1992, p. 14). Specifically, the population aged

above 60, functional, and independent, potentially constitutes a social capital for countries and communities if policies and appropriate conditions are encouraged to promote the direct and indirect social and economic contribution of this population group (Garay Villegas, Montes de Oca Zavala, & Guillen, 2014).

Comprehensive Gerontological Development (CGD)

Gerontological Research Unit of the Zaragoza Campus of the National Autonomous University of Mexico has advanced the concept of Comprehensive Gerontological Development to refer to the process of optimizing and strengthening the human capacities of aging people to achieve maximum health, welfare, and quality of life conditions throughout ageing and old age. Such a concept takes into account the influence of power, gender, sociocultural, economic, and political factors as well as the opportunities and the resources available for the individual in society. Furthermore, CGD is essentially as a process of transformation, growth, and continued strengthening of the individual, community, and social systems, while recognizing that aging and aged populations are an important form of social capital (Cramm, van Dijk, & Nieboer, 2012; Fernández-Ballesteros et al., 2011; Pérez-Cuevas et al., 2015). The main components incorporated into our CGD approach are the following:

- *Citizenship*. Prominence is given to the fact that the old age person is a citizen with an inalienable right to life, freedom, dignity, health, and welfare.
- *Physical and cognitive abilities and mental health*. It is acknowledged that a high percentage of those aged above 60 years are fully functional and independent.
- Human capacities. These are part of the human condition and refer to the capacities that old people can exercise throughout their lives. Capacities are categorized as follows: (a) *erotic* (passion, joy, daydream, and pleasure; (b) *sapiens* (memory, reasoning, and judgment); (c) *ludens* (create, dream, and imagine); (d) *economic*; (e) *political* (assess, build alternatives, choose, and decide); (f) *faber* (acting with intent, modify through practice the material world, acting on the subjective and objective worlds).
- *Individual social capital.* Represented by the actual or potential resources linked to the possession of a reliable network of more or less institutionalized relationships of mutual recognition (Tzanakis, 2013).
- *Community social capital.* Determined by social networks, participatory development, and good governance. It covers the rules, institutions, and organizations that promote trust and cooperation among people, communities, and society as a whole (Durston, 1999).

For the older persons to have the option for self-fulfilling development, they need to have access to formal and informal lifelong education, health care, employment, social security, a stimulating environment, and positive social recognition as individuals. The CGD approach focuses on the individual and on the social environment in which he or she is immersed (family, neighborhood, community, country). It involves an interplay between the individual and his or her environment acknowledging the fact that throughout life the environment facilitates or prevents the process of physical, cognitive, psychological, social, and spiritual growth. That is, our tenet is that the older person is a complex and harmonious being, which develops within a given physical, psychological, and social context of which becoming an integrative part of a whole. Furthermore, the old person is endowed with consciousness, intelligence, will, intentionality, affection, and creativity. All these features and attributes prevail throughout life, and old age is not the exception. However, there is a serious prejudice about the people who reach an old age. It is considered that they can no longer contribute to their families, community, and social development; the potential they represent as a great social capital is ignored and denied.

In this context, the social capital represented by aging and aged people, that is, the set of actual and potential resources they possess is related to their knowledge and to their networks of formal and informal social support. This capital consists of skills and attitudes such as leadership, goodwill, friendship, and empathy, which, if recognized and enforced by their communities, may lead to an accumulation of social capital that that will influence their social potential for improving the living conditions in their communities. Hence, through those actual or potential resources, they can gain access to resources, whether financial, material, informational, or emotional.

CGD is associated with physical, social, and emotional well-being. To the satisfaction of older people's needs such as autonomy, participation, membership, solidarity, peace, social support, personal safety, and self-value, it is important for them to have the opportunity to take part in a rewarding environment promoting affection, creative expression, talent development, continual socialization, and the individual's welfare. In this scenario, it is necessary to acknowledge the resources and potentials the elderly have and to guarantee the conjunction of three simultaneous conditions: "want to do," "know how to do," and "can do." These conditions are as follows:

To practice CGD it is necessary to be willing:

• *To be a citizen.* The senior person must have the conviction that he or she is a citizen endowed with basic rights and not merely a sick, disabled person, who no longer learns and has nothing else to do in life because they have reached old age.

- *To be recognized.* The older persons must feel and believe that what they do is worth it, for themselves, for their family, for their communities, and for society as a whole, and that they are able to influence changes to happen.
- *To be participatory*. They should feel stimulated to undertake actions for themselves, for their family, for their communities, making use of their social support networks.

If the older person meets the above, it means they want, and therefore, will become a decisive engine in the generation of social action.

To practice CGD it is necessary to know:

- *The meanings of the aging process and old age.* Knowing what the possibilities and limitations that occur with aging are, how to deal with the and how to act in accordance with them.
- *The type of development to be achieved.* The definition of physical, psychological, social, occupational, and spiritual developmental goals.
- *What motivates the individual?* Why to engage in a CGD process? That is, the direction that he or she gives to such a process will guide his or her practice.
- *How to do it?* The knowledge of how to achieve a CGD must be enforced to make the individual aware of the strategies, methods, and that could promote it and how to apply them.
- *What is the best strategy?* It is important to consider that CGD should be interactive and reciprocal, that is, the older persons should capitalize their social support networks, both formal and informal. They will have to be aware of who they are, where they are, and what support is offered.

Nevertheless, older persons who *want* and *know* are not always able to do it. There is no use if the person has a clear and convincing decision but cannot carry out actions to achieve a CGD. Therefore, it is also necessary:

- *To be able.* That is, to be functional, independent, and autonomous to perform what they intended to do or achieve.
- To have resources. Having the facilities required to meet specific objectives and targets.
- To have an appropriate environment. Characterized by the promotion of public policies, programs, and initiatives consistent with the CGD approach.

Conclusion

Aging is an individualized process, and it is determined by biological, psychological, and social factors. It is considered of utmost importance to promote an interdisciplinary perspective encompassing the wide range of elements affecting the ageing person. Aging occurs within a specific culture, which involves economic, political, and psychosocial factors in addition to biological factors inherent to the individual. Hence, the way individuals age should not be generalized as if the process were the same for all individuals and contexts. That is, and as stated above, human aging is immersed in particular social and historic contexts and determined by cultural, social, and economic policies. The aging of population is perceived differently, depending on the social, economic, and political approach, with perspectives of the older persons that may vary from their conception as social and economic burdens to a their visualization as elements of social capital for the development of society (Durston, 1999; Gray, 2009). It is our conviction that aging may be accompanied by a continuous process of development through which people improve and strengthen their human, physical, psychological, and social potential during their aging stage, to actively and responsibly make up a social capital to achieve maximum health, welfare, and quality of life, according to their own expectations and decisions, considering their sociocultural context.

In our opinion, a positive view on aging and old age may contribute to the recognition of the social capital that the population of independent older adults represents both for their own development and for that of their communities, thus promoting their potentialities to actively meet the challenges inherent in the development of their societies while meeting their own needs while maintaining their independence and autonomy.

Acknowledgments

We thank Dr. Javier Vivaldo Lima, professor at the *Universidad Autónoma Metropolitana*, in Mexico, for his assistance in the revision of the article.

Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The authors disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: The study was carried out with financial support of the Gerontological Research Unit of the FES Zaragoza, UNAM. *Dirección General de Asuntos del Personal Académico, Proyecto PAPIME, PE305516.*

References

- Alwin, D. F. (2012). Integrating varieties of life course concepts. The Journals of Gerontology, Series B: Psychological Sciences & Social Sciences, 67, 206-220.
- Bourdieu, P., & Wacquant, L. (1992). *Invitation to reflexive* sociology (p.14). Chicago, USA: University Press.
- Brüssow, H. (2013). What is health? *Microbial Biotechnology*, 6, 341-348.

- Cho, J., Martin, P., & Poon, L. W. (2015). Successful aging and subjective well-being among oldest-old adults. *The Gerontologist*, 55, 132-143.
- Cramm, J. M., van Dijk, H. M., & Nieboer, A. P. (2012). The importance of neighborhood social cohesion and social capital for the well being of older adults in the community. *The Gerontologist*, 53, 142-152.
- Dannefer, D., & Daub, A. (2009). Extending the interrogation: Life span, life course, and the constitution of human aging. Advances in Life Course Research, 14, 15-27.
- Durston, J. (1999). Construyendo capital social comunitario [Constructing community social capital]. *Revista de la CEPAL*, 69, 103-118.
- Fernández-Ballesteros, R., García, L. F., Abarca, D., Blanc, E., Efklides, A., Moraitou, D., . . . Patricia, S. (2010). The concept of "ageing well" in ten Latin American and European countries. *Ageing & Society*, 30, 41-56.
- Fernández-Ballesteros, R., Zamarrón, M. D., Díez-Nicolás, J., López-Bravo, M. D., Molina, M. Á., & Schettini, R. (2011). Productivity in old age. *Research on Aging*, 33, 205-226.
- Freixas, A., Luque, B., & Reina, A. (2012). Critical feminist gerontology: In the back room of research. *Journal of Women & Aging*, 24, 44-58.
- Garay Villegas, S., Montes de Oca Zavala, V., & Guillen, J. (2014). Social support and social networks among the elderly in Mexico. *Population Ageing*, 7, 143-159.
- Goldsmith, T. C. (2014). Modern evolutionary mechanics theories and resolving the programmed/non-programmed aging controversy. *Biochemistry (Moscow)*, 79, 1049-1055.
- Gray, A. (2009). The social capital of older people. *Ageing & Society*, 29, 5-31.
- Hayflick, L. (1999). Defining ageing. In L. Hayflick (Ed.), *How* and why we age (pp. 49-57). Barcelona, Spain: Herder.
- Instituto Nacional de Estadística y Geografía. (2014). *Statistics related to the international day of older persons*. México: INEGI. Retrieved from http://www.inegi.org.mx/saladep-rensa/aproposito/2014/adultos0.pdf
- Johnson, R. J., Mossakowski, K. N., & Hill, T. D. (2011). Health status and the end-of-life stage. *Advances in Life Course Research*, 16, 132-143.
- Mendoza-Núñez, V. M. (2013). Healthy ageing. In J. Lopéz Barcena (Ed.), PAC - General Medicine 5 (pp. 162-229). México City, México: Intersistemas Editores.
- Mendoza-Núñez, V. M., Martínez-Maldonado, M. L., & Correa-Muñoz, E. (2009). Implementation of an active aging model in Mexico for prevention and control of chronic diseases in the elderly. *BMC Geriatrics*, 9, Article 40. doi:10.1186/1471-2318-9-40
- Mendoza-Núñez, V. M., Martínez-Maldonado, M. L., & Vivaldo-Martínez, M. (2016). What is the onset age of human aging and old age? *International Journal of Gerontology*, 10, 56. doi:10.1016/j.ijge.2015.06.004
- Niebrój, L. T. (2006). Defining health/illness: Societal and/or clinical medicine? *Journal of Physiology and Pharmacology*, 57(Suppl. 4), 251-262.
- North, M. S., & Fiske, S. T. (2012). An inconvenienced youth? Ageism and its potential intergenerational roots. *Psychological Bulletin*, 138, 982-997.

- Pérez-Cuevas, R., Doubova, S. V., Bazaldúa-Merino, L. A., Reyes-Morales, H., Martínez, D., Karam, R., . . . Muñoz-Hernández, O. (2015). A social health services model to promote active ageing in Mexico: Design and evaluation of a pilot programme. *Ageing & Society*, 35, 1457-1480.
- Powell, J. L., & Biggs, S. (2003). Foucauldian Gerontology: A methodology for understanding aging. *Electronic Journal* of Sociology, 7(2). Retrieved from http://www.sociology. org/content/vol7.2/03_powell_biggs.html
- Price, K. A., & Tinker, A. M. (2014). Creativity in later life. *Maturitas*, 78, 281-286.
- Rodriguez-Mañas, L., & Fried, L. P. (2015). Frailty in the clinical scenario. *The Lancet*, 385, e7-e8. doi:10.1016/S0140-6736(14)61595-6
- Rowe, J. W., & Kahn, R. L. (1987). Human aging: Usual and successful. *Science*, 237, 143-149.
- Sergiev, P. V., Dontsova, O. A., & Berezkin, G. V. (2015). Theories of aging: An ever-evolving field. *Acta Naturae*, 7, 9-18.

- Shroufi, A., Chowdhury, R., & Aston, L. M. (2011). Measuring health: A practical challenge with a philosophical solution? *Maturitas*, 68, 210-216.
- Tzanakis, M. (2013). Social capital in Bourdieu's, Coleman's and Putnam's theory: Empirical evidence and emergent measurement issues. *Educate*, *13*(2), 2-23.
- United Nations. (2002). Report of the Second World Assembly on Ageing, Madrid, April 8-12, 2002. New York, NY: Author.
- Vivaldo-Martínez, M. (2008). Development of gerontology in the world and in Mexico. In V. Mendoza-Núñez, M. L. Martínez-Maldonado, & L. Vargas-Guadarrama (Eds.), Ageism: Prejudices and stereotypes of ageing (pp. 101-125). México City: Facultad de Estudios Superiores Zaragoza-Zaragoza, Universidad Nacional Autónoma de México.
- Xue, Q. L. (2011). The frailty syndrome: Definition and natural history. *Clinics in Geriatric Medicine*, 27, 1-15.