

# Population Aging in Latin America: A Salutogenic Understanding is Needed

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## ABSTRACT

As population aging advances, the urgency of observing healthcare models that seek to promote the comprehensiveness of the older person becomes evident. This short review explores some theoretical points that encourage the study of the Salutogenic Paradigm proposed by Antonovsky (1996), pondering the possible benefits for the gerontological field. Short readings, such as the one presented here, encourage us to explore and better understand the health of older adults and the care mechanisms that arise from it.

**Keywords:** older adults, aging epidemiology, demographics, public health

## INTRODUCTION: BACKGROUND

The training and performance of healthcare professionals have changed a great deal since the last century. Public health systems have transitioned from healthcare models that privileged disease or injury over the holistic care of patients. These models sought medical explanations to justify the discomfort or death of the population (the devotion of the disease care system); albeit they were unable to meet the changes in the demands and needs of users for a long time, so they ended up being obsolete and not very faithful to the realities of healthcare.

It has been globally accepted that health, in its most complete concept, goes beyond pathophysiological aspects, involving social, political, religious, and environmental issues of equal relevance. Thus, for an individual to be healthy, he or she must have access to a dignified life, with the minimum conditions for this. Nevertheless, these conditioning factors take on an even more expressive value in old age, since they are linked to the reduction of the functional and physiological capacities of the human body, and the repercussions that these reductions have on the place that contemporary society gives to older adults (León-Fernández, 2016; Partridge et al., 2018).

Just as society evolves and adopts increasingly complex mechanisms of scientific and technological development, the same is true in the field of social relations. Aging now does not portray the same connotation as it might have had two or three decades ago. It leads us to think that the contemporary senior person requires new forms of healthcare that are in tune with

his lifestyle and existential pretensions (Montero and García, 2017; The World Bank, 2020).

Due to the strengthening of primary care actions and the introduction of more comprehensive healthcare systems, societies began to experience a social phenomenon with significant repercussions on the overall age structure; nowadays, adults can expect to live over 65 years of age, and this figure is even higher among women. Society has a high rate of aging when its older population segment (those aged sixty years or more) is greater than the infant-juvenile (those under fifteen years of age). For this to occur, there must be a decades-long trend of declining fertility and birth rates, which, in turn, would allow earlier births to reach older ages, an epidemiological fact also known as the survival rate (Kowal et al., 2016).

Scrutinizing this phenomenon of collective importance seems to be a matter of urgency nowadays, especially when considering its implications for the health of aging individuals. This short review builds on some aspects related to the population growth in the Latin American region, discussing the Salutogenic Paradigm as a possible approach to achieving active aging. To this end, it incorporates some recommendations in the basic fields of contemporary gerontology, with the intention of stimulating debate in the scientific community, especially in those areas interested in the global phenomenon. Suffice to say that this is a conceptual update, rather than an exhaustive analysis of the entire scientific production.

**Table 1.** Population (both sexes) aged 65 and over by region: 2015, 2030, and 2050 (Kowal et al., 2016, p. 6)

Region	Population (in millions)			% Regional total population		
	2015	2030	2050	2015	2030	2050
Africa	40.6	70.3	150.5	3.5	4.4	6.7
Asia	341.4	587.3	975.3	7.9	12.1	18.8
Europe	129.6	169.1	196.8	17.4	22.8	27.8
Latin America and the Caribbean	47.0	82.5	139.2	7.6	11.8	18.6
North America	53.9	82.4	94.6	15.1	20.7	21.4
Oceania	4.6	7.0	9.5	12.5	16.2	19.5
World	617.1	998.7	1,565.8	8.5	12.0	16.7

## POPULATION AGING OVERVIEW IN LATIN AMERICA

Worldwide, the profile of population aging has proven to be quite divergent, as countries vary both internally and externally (Table 1). In European and Asian countries, population aging was observed earlier. In these hemispheres, scientific and technological advances have driven new living conditions and lifestyles in their populations, resulting in an expressive increase in life expectancy at birth and the expectation of living over 65 years of age (Tokudome et al., 2016; World Health Organization [WHO], 2015). Although Latin America is the second least aged region in the world, the trend with which countries are showing an inversion in their age structure is a matter of immediate concern for their governments (Amarante et al., 2021).

Changes in the aging profile have also incorporated distinctions in the forms of illness and death of older adults (Sallberg, 2022). For instance, the leading causes of geriatric morbidity and mortality in Latin American countries are preventable chronic diseases, which are characterized by affecting mainly individuals with a less favorable sociodemographic background. It is worth pointing out that the higher prevalence of chronic diseases requires continuous and costly treatment, impossible to be supported by the income of the elderly, a fact that generates a negative effect on the family's financial organization (Hajat and Stein, 2018).

From the above arises another challenge for the aging population, such as polypharmacy. Recent pharmaco-epidemiological studies have shown a frightening behavior in the consumption of up to five drugs in elderly Latin Americans (Mangin et al., 2018). This is a scenario that raises a red flag for public health systems, not only in terms of public expenditure but also incorporates setbacks for the achievement of active and healthy aging in the region.

To address these challenges, regional interventions have been agreed upon in the Central American axis. In 2011, the "Declaration of Antigua Guatemala" was signed, with representation from all Central American Ministries of Health. The document incorporates a series of recommendations to halt the epidemic of chronic non-communicable diseases in Central America and promote quality of life in old age (Council of the Ministers of Health of Central America, 2011). Differently, actions are taken individually by each South American government, without the guidance of a regional plan prepared for this purpose.

Even though infectious diseases have been mitigated to a large extent, some of these countries still face significant

challenges in the preventive and therapeutic approach to this type of disease. The explanations for this are based on the mucked capacity of public health systems, especially concerning epidemiological and health surveillance networks, and on a welfarist ideology that ignores the social determinants that, in turn, create important gaps between populations and generations (Figliuoli et al., 2018; WHO, 2015).

Moreover, the planning and management of population aging in Latin America also show disparities between its central, northern, and southern hemispheres. Southern countries, such as Brazil, Chile, Uruguay, and Argentina, advocate social and health models that seek to ensure that the adult population of their nations can meet the upcoming challenges of aging.

In Central America, Costa Rica and Panama stand out as having the highest rates of population aging and this is because these two countries have the most robust public health and social assistance systems in this region (Morales-Martínez, 2015; Murillo, 2021). In the north, Mexico offers one of the most comprehensive and universal public health systems, with older adults receiving priority at all levels of care (Díaz-Tendero, 2011; Robles-Silva et al., 2020).

As voiced by Montero and García (2017, p. 17), population aging in Latin America is also "associated with aspects of urbanization such as, for example, greater health and education coverage together with greater participation of women in the formal labor market and, consequently, fewer children". This circumstance has been responsible for the emergence of a new structure in Latin American families, which historically had a female presence tied to domestic care for older adults and children. Negative figures in fertility and birth rates in the region are also related.

It is imperative to look at the Brazilian case since this country projects to be the sixth nation with the highest rate of population aging on a global scale by 2050 (Oliveira, 2019). These statistics place strain on the State's actions, which is why attempts are being made to alleviate the multidimensional weight of this phenomenon in the political, environmental, health, economic and social spheres. Aside from that, Brazil has one of the most responsive and articulated public health systems, which coordinates the perspectives of healthcare for the elderly at all levels of care in a comprehensive, universal, and equitable manner.

As in the rest of the world, public health and social assistance systems in Latin America historically moved between models that prioritized pathological approximations, before understanding cause-effect relationships in which the

social issue was not the general concern. Nowadays, however, it is known that the impact of population aging is also a conditioning factor in overall social organization. Therefore, the action and intervention of the States are plausible to be examined by observing the programs and services offered by the public bodies responsible for demographic and social management (Arza, 2019; Huenchuan, 2018).

It is possible to understand the care ideologies validated in each Latin American territory with the help of specialized public bodies. This aspect makes it possible to identify the divergences in terms of the universal right to health and its ramifications in current healthy and active aging pursued by contemporary societies.

One of the great triumphs for the aging population is the establishment of institutions to address aging in all its spheres. In this sense, since the 1990s and the beginning of the new millennium, most Latin American countries have established an extensive legal-health framework that includes, consequently, the foundation of the National Councils for Older Adults. These institutions have a dual task: to represent the State's actions toward the aging society and validate the social rights recognized in their territories.

In performing these functions, they should be guided by a holistic understanding of the elder person in its global expression, i.e., meticulously encompassing all areas of human life (Beard et al., 2016). To boot, they must address the complexity and heterogeneity seen in this population segment, and their pathological and social characteristics, according to their degree and profile of needs. With this, such institutions materialize the state action before the challenge of population aging, their institutional strategies, and the limitations found in their national approach.

It ought to be highlighted that not all Latin American countries adopt the same benchmarks to protect and promote the social rights granted to senior citizens, an attested fact by regional reports that expose the gaps in care through less favorable social and health indicators in countries with public systems that are less in line with their current realities (Benítez-Hernández et al., 2018; Huenchuan, 2018; WHO, 2015).

It is equally valid to remember that Latin America is one of the most multicultural and multiracial regions in the world, home to hundreds of ethnic groups that—as is to be expected—have their mechanisms of self-identity, social organization, and understanding of the health-disease-death cycle (Amarante et al., 2021; Oddone, 2014).

As a result, it is not possible to generalize the aging of populations, even when they come from the same country or internal region. It may seem plain but is absent from most Latin American policies on aging. Such differences in the understanding and extension of the social and welfare rights of older adults unveil a series of technical and organizational hurdles between countries and create, so to speak, regional inequality in the applicability of the international framework that ensures older citizens' integrity (Arza, 2019; Torrado-Ramos et al., 2014).

## THE SALUTOGENIC APPROACH TO POPULATION AGING: AN OPEN WINDOW OR A CURRENT CHORE

Throughout the history of medicine and health sciences, the ineffectiveness of superimposing efforts on pathological aspects has been verified. Although it is through a broad knowledge of pathologies, their etiologies, clinical manifestations, and other organic aspects that medical sciences have steadily progressed in recent decades, we should not hide the fact that biomedical extremism in health has also managed to be responsible for limiting the expansion of a more holistic healthcare in line with the patient's needs. In the 1980s, a new way of perceiving health emerged among the work presented by Antonovsky (1993, 1996), an Israeli sociologist who later joined and helped forge the field now known as medical sociology. For this author, the study of the stress in which people found themselves in their day-to-day lives would point to the discovery of a new perspective on health promotion. Thus, Antonovsky (1983) agreed that social and cultural determinants and intrinsic aspects of everyone have the potential to maintain and promote health, even in the presence of burdensome or disabling circumstances.

In Mittelmark and Bull's (2022, p. 3) view, "the term salutogenesis is also frequently used to refer, more generally, to an approach to health theory, research and practice emphasizing resources that people may call on to improve health". Thereby, the key to the Salutogenic Paradigm (see [Appendix A](#) and [Appendix B](#) for a detailed description) is the idea of promoting the already existing capabilities of older adults so that, based on their strengths, they can have a positive experience during their old age, with or without disabling illnesses (Mittelmark and Bull, 2013). Hence, it is not a matter of ignoring the severity or advanced stage of an illness, but of emphasizing the capabilities for self-development of defense mechanisms in the face of stressful events (e.g., chronic illness, widowhood, loneliness, financial and/or existential crises, amongst others). As Antonovsky (1996) suggests, these responses form a network of generalized resilience resources (GRR), grouped into biological, physical, and psychosocial elements.

The community with which the older adult maintains a sense of belonging and/or self-identification plays a crucial role in the proper development of GRRs. This has recently been confirmed by Koelen and Eriksson (2022), stating that the elders spend about 80% of their time in community and home. Accordingly, physical and social environment in which everyday life takes place must be a space conducive to active and healthy aging. In Koelen and Eriksson (2022, p. 196):

"The maintenance of social relationships and having the possibility to be physically and socially active is closely related to having a purpose in life. It enables older people to recognize and use GRRs to strengthen one or more of the three dimensions of sense of coherence—SOC (meaningfulness, manageability, and comprehensibility) which in turn enables them to recognize, pick up, and use SRRs as needed in specific encounters with stressors."

Notwithstanding, for individuals to actually activate and utilize their GRRs, they must first be able to retain a SOC. As stated by Antonovsky (1993, p. 731), SOC “refers to a global orientation to one’s inner and outer environments which is hypothesized to be a significant determinant of location and movement on the health ease/dis-ease continuum”. Furthermore, “the strength of one’s SOC is shaped by three kinds of life experiences: consistency, underload-overload balance, and participation in socially valued decision-making” (Antonovsky, 1996, p. 15).

Several works have looked into the benefits of adopting the Salutogenic Paradigm in health programs and services offered to the general population, yet a large scientific gap is evident as far as the Latin American elderly population is concerned. By way of example, a study carried out with 267 older adults’ caregivers in Spain found that the most resilient caregivers do not become burned-out, but rather achieve greater work engagement skills and competencies (vigor, dedication, and absorption), and to the extent that they reinforce these personal attributes, they mitigate vulnerability to burnout (Carvalho et al., 2006).

Of the limited number studies identified in Latin America, the following are worth considering. In Mexico, a study conducted with 108 elders found that SOC could help older adults understand, manage, and give meaning to the stressful life events they experience and thus perceive their environment as less threatening (Salazar-Moreno et al., 2020). In the work of Bohorquez and Bojorque (2021), the relevance of self-esteem, resilient activities, and sustainable contributions to the productive development of the Ecuadorian elderly is highlighted. With a sample of 366 elderly, the authors conclude that these elements are directly influenced by the legal-health framework that establishes the norms for the protection of the elderly.

Armas-Ramírez et al. (2019) investigated the knowledge that Cuban academics from various health fields have regarding the identification and treatment of low self-esteem in the elderly through a salutogenic approach. The study concludes that adequate self-esteem means a well emotional, cognitive, and practical adjustment that positively influences all areas of life. On negative occasions, it can lead to harmful reactions such as depression, dysthymias, and other expressions of affective states, which sometimes present as anxiety and frustration and result in a feeling of handicap. It is therefore important that professionals in training are qualified to address this care challenge.

A high SOC is related to better oral health indicators in Brazilian elders, suggesting that the salutogenic approach in dentistry may protect against negative factors that impact oral health in old age (Davoglio et al., 2016, 2020). In the same country, the study conducted by Filho (2020) showed that older adults who have a high SOC report lower daytime sleepiness and higher quality of life. Such research supports the hypothesis that a swap in the forms for healthcare for older adults are prudent.

Indeed, the Salutogenic Paradigm applied to geriatrics and gerontology poses the question ‘how can older adults cope with active and healthy aging in today’s world amid the coexistence of stressors?’, and in doing so, begs the question,

‘how can public health systems incorporate this vision of health?’. To answer these queries, it is indispensable to understand that our biggest challenge in the health field has been to approach the peculiarities of everyone. In large part, this is due to the repressed demands in the public health systems, which end up hastening the medical consultation time (in which the bond with the patient should be established). Hence, expedited and not so in-depth consultations do not allow identification of personalized interventions for each case, so it is usual to hear complaints amongst patients and kin, even though geriatric consultations are a significant recurrence in the health professionals’ schedule.

It is squarely for this reason that the model proposed by Antonovsky (1993, 1996) has the potential to incorporate changes in geriatric-gerontological care. The following should be considered:

1. In the salutogenic perspective, aging, as a natural, irreversible, and always progressive process, acquires a notion of positive experience, even when the senile factors outnumber the senescent ones. Illness or disability would be viewed as just another state of mind. What really matters is the ability to overcome the task, giving value to the process and stages overcome.
2. Based on this paradigm, the preventive, promotive and therapeutic approaches with older adults would seek to propel their abilities and strengths. In turn, this would lead to finding immediate solutions, which are the product of the aging person’s own reasoning. Thus, it would involve their life history, their social support network, the healthcare team and their response to the stressor.
3. The direct element is the older person and not the illness. It is from the available GRRs that older adults develop their self-care potential to the fullest. Subsequently, there is an increase in the degree of autonomy and overall independence, turning them into decision-makers in matters involving their health and, in general, their life in society.
4. For geriatrics and gerontological care systems, this type of care model could help to reduce the expenditure incurred in hospital readmissions, continuous consumption of high-value drugs, and in patients with long periods due to sensitive primary care causes. In addition, it would be a suitable model to carry out actions to promote non-pharmacological activities with the same positive impact on the health profile of older adults.

## GERONTOLOGICAL FIELDS FOR THE USE AND APPLICATION OF THE SALUTOGENIC PARADIGM

As a field of practical and theoretical knowledge, contemporary gerontology has gone through several defining stages. With its origin anchored in the foundations of Geriatrics (medical specialty), it imposed the need for an all-

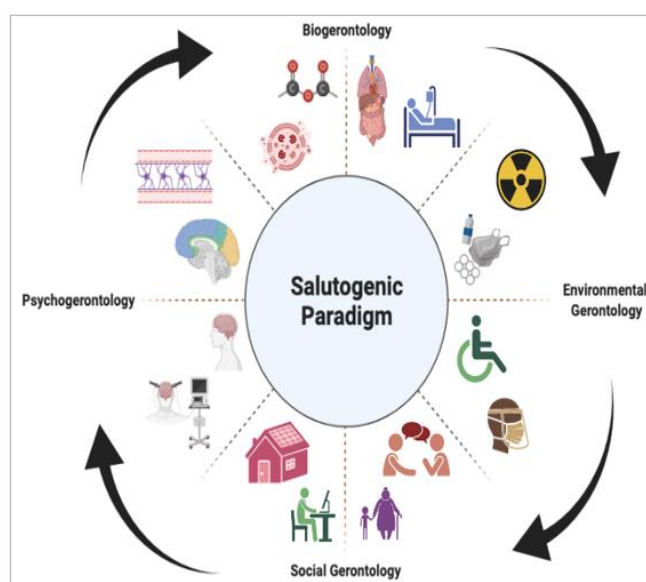
embracing vision of the health of older persons without detracting from the importance of biomedical advancements. Over the decades, it became a multidisciplinary field that is concerned with understanding and providing answers to the themes that arise because of population growth, which in turn implies a deeper understanding of the factors that hinder the potential to promote better living conditions during old age.

At present, the knowledge and applicability of contemporary gerontology concentrate on four main fields. In the first three places is the biopsychosocial gerontological vision, constituted by the biological, psychological, and social axes, respectively. Altogether, these try to fit into the modern conception of health, making contributions separately since each field has served as a cradle for the emergence of different theories and analytical approaches. The fourth field is the one that deals with the interaction between the elderly and the physical environment, and its consequences.

Biogerontology can be said to be concerned with understanding the global composition of the human body, from the atomic to the systemic point of view, which involves the application of the most up-to-date biomedical knowledge (Rattan, 2012). For this field, it is interested in describing the processes of disease and death of populations, in line with scientific and technological advances, and therefore maintains biological and chronological age as cardinal concepts. Although the concept of “geroscience” is still embryonic, we can already observe an interest in its use in Biogerontology related to the delay of aging (Bourg, 2022).

According to Schroots (2020), there are three models in Psychogerontology: age, aging, and the aged. Namely, research on the *psychology of the aged* focus on older adults and later life; the *psychology of age* describes and compares the differences in unlike age groups, and the *psychology of aging*, which studies some typicalness of change of average functioning intra-and-individual variability over time. More recently, perceived “cross-cultural psychogerontology” appears to be a subfield that deals with universals and differences in psychological aspects of aging across cultures (Albert and Tesch-Romer, 2019).

On the other hand, Sociogerontology applies the study of old age through the interpretative prism of the social sciences. To explain the social issue in old age, it uses theories such as *structural-functionalism* (older adults are immersed in a social system that has rules that establish the social roles expected of them); *separation or withdrawal* (older adults tend to isolate themselves from social environments to devote more time to themselves, which allows them to work on their autonomy and independence); *modernization* (changes in the structures and dynamics of societies generate, concomitantly, changes in the global perception that society has of aging, directly impacting the lives of elders, who must adopt new lifestyles, being globalization an example of this); *age stratification* (each generation has an ontogenetic life course referring to the stages of the life cycle, and some historical dimensions). Recent themes in this field are oriented to explain the gender and racial issue, the body conception, the social inequalities, and the contemporaneity of human beings (Martinson and Berridge, 2015; Piña-Morán, 2010).



**Figure 1.** Flowchart of gerontological fields integration for the application of the Salutogenic Paradigm in the healthcare of older adults

The latest field is that of environmental gerontology, but its short time has not been an impediment for several academics to set their sight to this field. According to Sánchez-González (2015, p. 98) this gerontological field aims to know, analyze, modify, and optimize the relationship between the aging person and his physical-social environment (the built environment). To this end, it is influenced by other applied fields, such as architecture, urban planning, engineering, ecology, anthropology, technical design, geography, among others, which seek to impose explanations for the use of the living and inert environment (García-Valdez et al., 2019). In Latin America, the most significant benefits are related to the development of more accessible and inclusive environments for older adults, both at home, in the community, and in public and private settings (Salas-Cardenas and Sánchez-González, 2014).

Comprehensive healthcare for older adults responds to a list of tangible and intangible variables and reflects that appropriation of knowledge produced from the four gerontological fields explained above. All fields play a determining role, so their readings must be hinged and never polarized. All this has been taken into consideration when elaborating **Figure 1**, which offers a multidimensional approach among the fields of contemporary gerontology for the application of the Salutogenic Paradigm. Epidemiological and sociodemographic data indicate that the time has come to reassess the current population dynamics. It has the same implications for the reorganization and supply of gerontological programs and services in each Latin American country.

To design a public health system that meets its users' demands, it becomes mandatory to scrutinize the preferences of each population segment in terms of age, race, and sex. Promoting the consolidation of the Salutogenic Paradigm in healthcare for older adults promises great and multiple benefits, although visibly in the medium and long term. Still, this does not mean that we should lose focus on this promising

model because there is no intervention with immediate outcomes that have the potential to reduce, for instance, the overwhelming costs that accompany the chronic diseases of natural aging. Nor is there, to date, any social itinerary that has managed to maintain a synergy between public expenditure and the exponential increase in the number of increasingly dependent people.

There is no doubt that contemporary gerontology plays an essential role in social policy for the senior citizens and medical care while at the same time reinforcing the self-identities of people who are aging and seeking to achieve a dignified life during their later years, it is time to reconsider our commitment to it. For years we have heeded assistance models that tend to put out the fire momentarily, but the ashes remain and accumulate. When dealing specifically with the aging population, the actions seem to orient to the end of life without opening the way to the realization of alternatives that allow exploring old age even with advanced age or ailments.

This scenario takes another tack when considering the usefulness proposed by the Salutogenic Paradigm since it does not focus on the disease/disability, to the contrary, it opts for the recognition of the factors that help to counteract the challenges of the day-to-day in old age. That is to say, in agreement with Flores-Cerqueda (2021, p. 3):

“Professional gerontology will be one capable of unifying the past, present, and future by analyzing the challenges of aging in its social evolution; of explaining the processes of demographic transition; of preventing and intervening in the processes of epidemiological transition; of predicting residential trends and of explaining the new forms of family structuring.”

Given the above, more educated, talented, and creative gerontologists who are highly concentrated on healthy and active aging are expected to contribute significantly to the Salutogenic Paradigm outputs and outcomes that are regionally viable.

This can occur under two conditions of professional development. The first is for professionals with a training ground in gerontology, i.e., who have completed three or more years of university studies. The second refers to a significant number of professionals, from various fields, who choose to continue their primary education in a postgraduate course related to human aging or gerontology. In both cases, it is a matter of Latin American countries reflecting on their present, so that they can foresee and face the future growth of their populations. For this to happen in a positive way, the transformation of educational models for the training and insertion of professionals skilled in the field of human aging cannot be postponed.

This callout has already been reiterated and collectively accepted by countries worldwide, as in the case of the ‘Declarations of the Second World Assembly on Aging’, held in Madrid, Spain in 2002.

In Latin America, efforts did not stop there, as there are regional forums and conferences focused on debating the impacts of population dynamics in their territories. The Experts Meeting on Aging and the Rights of Older Persons was organized by the Government of Costa Rica through the

National Council for Older Persons and the Economic Commission for Latin America and the Caribbean (ECLAC) Subregional Headquarters in Mexico. It was the first activity to straightforwardly address the interrelationship between aging and the implementation of the 2030 Agenda for Sustainable Development in Latin America and the Caribbean (ECLAC, 2018).

Before that meeting, the Charter of San José (Costa Rica) on the rights of older persons in Latin America and the Caribbean was made official in 2012, being one of the most recent gerontological instruments for the regional approach to population aging in Latin America, adopted at the ‘Third Regional Intergovernmental Conference on Aging in Latin America and the Caribbean’ (ECLAC, 2012).

Although Latin America can address the social phenomenon of population aging respectively, the main obstacle lies in the divergent interpretation of the fundamental rights of older adults, which ends up buttressing a neoliberal outlook with capitalist traits. It should be recalled that health attains through a set of elements that are beyond the biomedical conception alone, amongst which the physical and socio-political environments can limit or extend the well-being of populations.

## FURTHER SALUTOGENIC PERSPECTIVES

As stated along with this short review, works that address the Salutogenic Paradigm through the gerontological perspective are scarce in the region. Of the few that exist, there is a greater interest in biomedical aspects, making sense with the medical model that still seems to prevail. Thence, this type of brief communication raises interest in this field by highlighting the imperative of reformulating and rethinking the ways of healthcare for older adults. It is no secret that there is still a worldwide trend to focus on the pathology rather than the patient. For that reason, the salutogenic perspective needs to be further explored during the training of healthcare professionals to the extent that its theoretical and practical basis can be replicated in the healthcare practice, in the day-to-day work with elders. Geriatric and gerontological practice must guide on the pillars of a dignified life, and this requires a swap in the academic and professional training processes.

To meet the multidimensional challenge imposed by population aging, Latin American countries must adopt a holistic view of the aging phase. It means that old age can no longer be interpreted as an accumulation of claims and losses, as in the last decades (Cano-Gutiérrez et al., 2021). In particular, this obsolete idea of old age is becoming less and less accurate in modern societies, to the extent that there is now talk of a ‘fourth age’ which corresponds to the notion of living beyond the age of 85. It leads us to believe that old age should be a time of rejoicing and reflection on the entire life cycle. Nevertheless, the possibility of acquiring chronic diseases is high and almost inevitable due to the outcomes of senility and senescence, so it is precisely through the salutogenic vision that older adults could face these impasses. The strengthening of intrinsic abilities and the establishment of external bonds constitute the main activation and response mechanisms for satisfactory aging.

In the sector of public policy formulation, the Salutogenic Paradigm brings up several points to regard. In a scenario parallel to that expected by most public health promotion policies, individuals would be able to self-manage their health demands, adopting healthy lifestyle habits that would help them to postpone the onset of disabling diseases. When endorsed at an early age, those behaviors are likely to remain stable during the phases of life, including old age. Over the years, public health systems would experience a considerable reduction in the public expenditure on care for vulnerable populations, such as older adults.

Even when specific trends are detected for certain chronic diseases with low potential for cure, a high SOC will counteract the negative impacts on the health of older adults since there would be a greater mastery of the disease by older adults and the actions of health professionals would be more oriented towards strengthening the protective factors and not towards the hospital-centered monitoring of the disease.

Faced with an exponentially growing population and complex social scenarios, Latin American States find themselves obliged to review their legal frameworks to ensure that they are in line with the needs of their people. In doing so, they must incorporate proposals that are, in turn, capable of providing qualified and decisive healthcare. The lessons and epiphanies of the last decades, although belated, are the opportunity offered by the Salutogenic Paradigm to finally invest in what propels, in what provides health and well-being to the older adult.

As might be expected, the main limitation of this short review is that it does not follow methodical steps for the inclusion of the papers that made up the dissertation body. Indeed, studies written in languages other than English, Spanish, Portuguese, or French went unnoticed, which lessens the number of works included. This is justified by the fact that it was more work from the author's point of view rather than an exhaustive systematic review. Even with such a shortage, the text elaborated stimulates the reading of this type of alternative approach to geriatric-gerontological care.

Future research should focus on the comprehension of those resilient factors that function as protective shields against negative forces and in favor of active aging in the contemporary fields of gerontology. Such research could help to elaborate a more solid conceptual framework in the Latin American region since it would consequently have benefits for the global knowledge about the Salutogenic Paradigm and its implications in the advent of population aging.

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## REFERENCES

- Albert, I. and Tesch-Römer, C. (2019). Cross-cultural psychogerontology. *Encyclopedia of Gerontology and Population Aging*, 1-13. [https://doi.org/10.1007/978-3-319-69892-2\\_95-1](https://doi.org/10.1007/978-3-319-69892-2_95-1)
- Amarante, V., Colacce, M. and Manzi, P. (2021). Aging and productivity in Latin America. *Latin American Research Review*, 56(4), 844-863. <https://doi.org/10.25222/larr.924>
- Antonovsky, A. (1993). The structure and properties of the sense of coherence scale. *Social Science & Medicine*, 36(6), 725-733. [https://doi.org/10.1016/0277-9536\(93\)90033-Z](https://doi.org/10.1016/0277-9536(93)90033-Z)
- Antonovsky, A. (1996). The salutogenic model as a theory to guide health promotion. *Health Promotion International*, 11(1), 11-18. <https://doi.org/10.1093/heapro/11.1.11>
- Armas-Ramírez, N., Alba-Pérez, L. C. and Endo-Milán, J. Y. (2019). Salutogenic approach in the study of the self-esteem of the elderly. *Edumecentro*, 11(3), 282-288.
- Arza, C. (2019). Basic old-age protection in Latin America: Noncontributory pensions, coverage expansion strategies, and aging patterns across countries. *Population and Development Review*, 45, Welfare and Redistributive Effects of Social Assistance in the Global South (2019), 23-45. <https://doi.org/10.1111/padr.12267>
- Beard, J. R., Officer, A., de Carvalho, I. A., Sadana, R., Pot, A. M., Michel, J.-P., Lloyd-Sherlock, P. Epping-Jordan, J. E., Geeske peters, G. M. E. E., Mahanani, W. R., Thiagarajan, J. A. and Chatterji, S. (2016). The world report on ageing and health: A policy framework for healthy ageing. *The Lancet*, 387(10033), 2145-2154. [https://doi.org/10.1016/S0140-6736\(15\)00516-4](https://doi.org/10.1016/S0140-6736(15)00516-4)
- Benítez-Hernández, I., Cuesta-Mejía, L., Otero-Caballos, M. and Martín-Linares, X. (2018). Social protection of the elderly in selected countries. Legislation and programs. *International Health Convention, Cuba Salud*, 1-8.
- Bohorquez, G. and Bojorque, E. (2021). Self-esteem, resilience, and sustainable contributions for the productive development of the elderly who undertake in El Oro. *Revista Científica y Arbitrada de Ciencias Sociales y Trabajo Social "Tejedora" [Scientific and Arbitrated Journal of Social Sciences and Social Work "Tejedora"]*, 4(7), 29-41. <https://publicacionescd.uleam.edu.ec/index.php/tejedora/article/view/175>
- Bourg, E.L. (2022). Geroscience: The need to address some issues. *Biogerontology*, 23, 145-150. <https://doi.org/10.1007/s10522-022-09951-4>
- Cano-Gutiérrez, C., Gutiérrez-Robledo, L. M., Lourenço, R., Marín, P. P., Morales-Martínez, F., Parodi, J., Manas, L. R. and Zuniga Gil, C. H. (2021). Old age and the new ICD-11: Position of the Latin American Academy of Medicine for Older Persons. *Pan American Journal of Public Health*, 45, 1-4. <https://doi.org/10.26633/RPSP.2021.112>

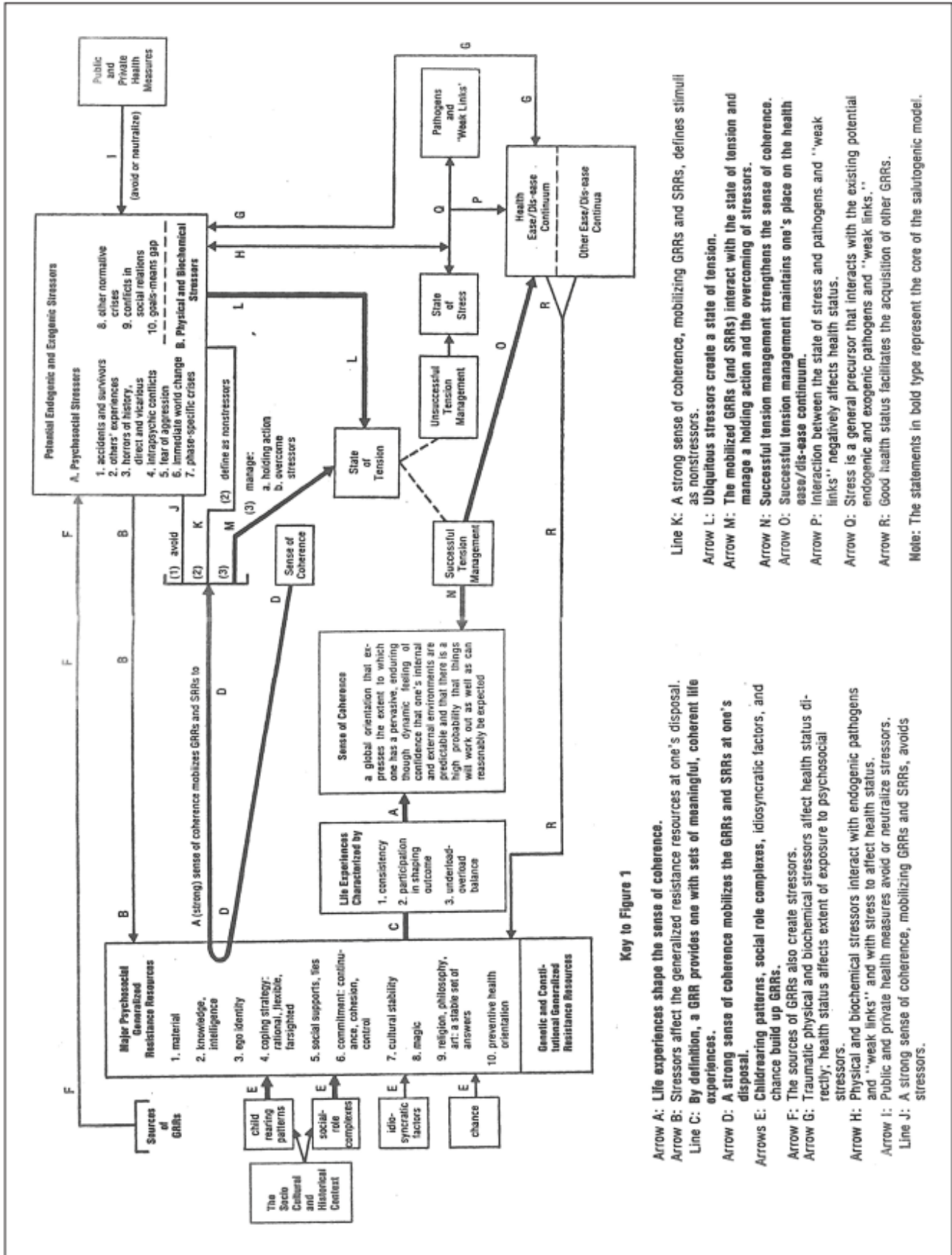
- Carvalho, V. A. M. L., Fernández-Calvo, B., Hernández-Martín, L., Ramos-Campos, F. and Contador-Castillo, I. (2006). Resiliencia y el modelo burnout-engagement en cuidadores formales de ancianos [Resilience and the burnout-engagement model in formal caregivers of the elderly]. *Psicothema [Psychothema]*, 18(4), 791-796.
- Council of the Ministers of Health of Central America. (2011). *Declaration of Antigua Guatemala. United to stop the epidemic of chronic non-communicable diseases in Central America and the Dominican Republic, June 23, 2011*. Guatemala City, Guatemala, 2011.
- Davoglio, R. S., Abegg, C., Fontavine, V. N., Oliveira, M. M. C., Aerts, D. R. G. C. and Cavalheiro, C. H. (2016). Relationship between Sense of Coherence and oral health in adults and elderly Brazilians. *Brazilian Oral Research*, 30(1), 1-9. <https://doi.org/10.1590/1807-3107BOR-2016.vol30.0056>
- Davoglio, R. S., Fontavine, V. N., Oliveira, M. M. C. and Abegg, C. (2020). Sense of coherence and impact of oral health on quality of life in adults and elderly in Southern Brazil. *Ciência saúde coletiva [Science Collective Health]*, 25(4), 1491-1498. <https://doi.org/10.1590/1413-81232020254.31652017>
- Díaz-Tendero, A.B. (2011). Population studies and approaches of social gerontology in Mexico. *Papeles de Población [Population Papers]*, 17(70), 49-79.
- ECLAC. (2012). Charter of San José on the rights of the elderly in Latin America and the Caribbean. *Economic Commission for Latin America and the Caribbean*. Available at: [https://repositorio.cepal.org/bitstream/handle/11362/21535/1/S2012897\\_en.pdf](https://repositorio.cepal.org/bitstream/handle/11362/21535/1/S2012897_en.pdf)
- ECLAC. (2018). Experts on aging and the rights of older persons met in Costa Rica to analyze the incorporation of older persons in the implementation of the 2030 agenda for sustainable development. *Economic Commission for Latin America and the Caribbean*. Available at: [https://www.un.org/development/desa/ageing/wp-content/uploads/sites/24/2017/07/UNDP\\_AARP\\_HelpAge\\_International\\_AgeingOlderpersons-and-2030-Agenda-2.pdf](https://www.un.org/development/desa/ageing/wp-content/uploads/sites/24/2017/07/UNDP_AARP_HelpAge_International_AgeingOlderpersons-and-2030-Agenda-2.pdf)
- Figliuoli, M. L. U., Flamini, V., Galdamez, M., Lambert, F., Li, M., Lissovolik, M. B., Mowatt, R., Puig, J., Klemm, A. D., Soto, M., Thomas, S., Freudenberg, C. and Orthofer, A. (2018). Growing pains: Is Latin America prepared for population aging? *International Monetary Fund*. <https://doi.org/10.5089/9781484326107.087>
- Filho, P.C.L. (2020). *Sonolência diurna, qualidade de vida relacionada ao sono e senso de coerência em idosos [Daytime sleepiness, sleep-related quality of life and sense of coherence in the elderly]* [Master's thesis, Universidade Federal de Pernambuco].
- Flores-Cerqueda, S. (2021). Aging in the 21st century and the need for professionals in gerontology. *Identidad Bolivariana*, 5(2), 1-17.
- García-Valdez, M. T., Sánchez-González, D. and Román-Pérez, R. (2019). Aging and adaptation strategies to urban environments from environmental gerontology. *Estudios Demográficos y Urbanos [Demographic and Urban Studies]*, 34(1), 101-128. <https://doi.org/10.24201/edu.v34i1.1810>
- Hajat, C. and Stein, E. (2018). The global burden of multiple chronic conditions: A narrative review. *Preventive Medicine Reports*, 12, 284-293. <https://doi.org/10.1016/j.pmedr.2018.10.008>
- Huenchuan, S. (2018). Aging, older persons and the 2030 agenda for sustainable development: Regional and human rights perspective. *ECLAC Books*, 154 (LC/PUB.2018/24-P), Santiago, Chile.
- Koelen, M. and Eriksson, M. (2022). Older people, sense of coherence and community. In M. B. Mittelmark, G. F. Bauer, L. Vaandrager, J. M. Pelikan, S. Sagy, M. Eriksson, B. Lindström and C. M. Magistretti (Eds.), *The handbook of salutogenesis*. Springer. [https://doi.org/10.1007/978-3-030-79515-3\\_19](https://doi.org/10.1007/978-3-030-79515-3_19)
- Kowal, P., Goodkind, D. and He, W. (2016) An Aging World: 2015, International Population Reports. U.S. Government Printing Office, Washington DC. Available at: <http://www.census.gov/library/publications/2016/demo/P95-16-1.html>
- León-Fernández, M. (2016). Data and challenges of population aging: Reflection on public policies. *Revista Nuevo Humanismo [New Humanism Magazine]*, 4(1), 11-24. <https://doi.org/10.15359/rnh.4-1.1>
- Mangin, D., Bahat, G., Golomb, B. A., Mallery, L. H., Moorhouse, P., Onder, G., Petrovic, M. and Garfinkel, D. (2018). International group for reducing inappropriate medication use and polypharmacy (IGRIMUP): Position statement and 10 recommendations for action. *Drugs Aging*, 35, 575-587. <https://doi.org/10.1007/s40266-018-0554-2>
- Martinson, M. and Berridge, C. (2015). Successful aging and its discontents: a systematic review of the social gerontology literature. *The Gerontologist*, 55(1), 58-69. <https://doi.org/10.1093/geront/gnu037>
- Mittelmark, M. B. and Bull, T. (2013). The salutogenic model of health in health promotion research. *Global Health Promotion*, 20(3), 30-38. <https://doi.org/10.1177/1757975913486684>
- Montero, L. and García, J. (2017). Multidimensional panorama of urban development in Latin America and the Caribbean. *Economic Commission for Latin America and the Caribbean–ECLAC. United Nations, Chile, Santiago*. Available at: [https://repositorio.cepal.org/bitstream/handle/11362/47719/1/S2100654\\_en.pdf](https://repositorio.cepal.org/bitstream/handle/11362/47719/1/S2100654_en.pdf)
- Morales-Martínez, F. (2015). The ageing process in Costa Rica: A current and future perspective. *Acta Méd Costarric [Costa Rican Medical Act]*, 57(2), 74-79.
- Murillo, R. S. G. (2021). Aging in Central America and the Caribbean. *Cadernos Ibero-Americanos de Direito Sanitário Expediente, Brasília [Ibero-American Health Law Notebooks Expediente, Brasília]*, 10(1), 248-254. <https://doi.org/10.17566/ciads.v10i1.747>
- Oddone, M. J. (2014). El desafío de la diversidad en el envejecimiento en América Latina [The challenge of diversity in aging in Latin America]. *Voces Fenix*, 36, 82-90.
- Oliveira, A. S. (2019). Transition, epidemiological transition and population aging in Brazil. *Hygeia*, 15(31), 69-79. <https://doi.org/10.14393/Hygeia153248614>



- Partridge, L., Deelen, J. and Slagboom, P. E. (2018). Facing up to the global challenges of ageing. *Nature*, 561, 45-56. <https://doi.org/10.1038/s41586-018-0457-8>
- Piña-Morán, M. (2010). Matriz de intervención en gerontología social [Intervention matrix in social gerontology]. *Revista Rumbos TS. Un Espacio Crítico Para La Reflexión En Ciencias Sociales* [Rumbos TS Magazine. A Critical Space for Reflection in Social Sciences], 5, 71-91.
- Rattan, S. L. S. (2012). Biogerontology: From here to where? The Lord Cohen Medal Lecture-2011. *Biogerontology*, 13(1), 83-91. <https://doi.org/10.1007/s10522-011-9354-3>
- Robles-Silva, L., García-Barragán, T. L. and Ramírez-Contreras, M. G. (2020). Salud pública y envejecimiento en México: Revisión bibliométrica [Public health and aging in Mexico: Bibliometric review]. *Revista Médica del Instituto Mexicano del Seguro Social* [Medical Journal of the Mexican Institute of Social Security], 58(1), 37-49.
- Salas-Cardenas, S. M. and Sánchez-González, D. (2014). Population aging, health and urban environment in Latin America. Challenges of gerontological Urbanism. *Contexto: Revista de la Facultad de Arquitectura Universidad Autónoma de Nuevo León* [Context: Journal of the Faculty of Architecture Autonomous University of Nuevo León], 9, 31-49.
- Salazar-Moreno, C. A., Alonso-Castillo, M. M., Guzmán-Facundo, F. R. and López-García, K. S. (2020). Sense of coherence associated with life stressful events in elderly. *Enfermería Universitaria* [University Nursing], 17(3), 262-272. <https://doi.org/10.22201/eneo.23958421e.2020.3.853>
- Sallberg, M. (2022). Primary health care among old aged people. *Journal of Aging Science*, 10(1), 1.
- Sánchez-González, D. (2015). Ambiente físico-social y envejecimiento de la población desde la gerontología ambiental y geografía: Implicaciones socioespaciales en América Latina [Physical-social environment and population aging from environmental gerontology and geography: Socio-spatial implications in Latin America]. *Revista de Geografía Norte Grande* [Great North Geography Magazine], 60, 97-114. <https://doi.org/10.4067/S0718-34022015000100006>
- Schroots, J. F. (2020). Psychogerontology and gerodynamics. *Psychology: The Journal of the Hellenic Psychological Society*, 2(1), 13-24. <https://ejournals.epublishing.ekt.gr/index.php/psychology/article/view/24153>
- The World Bank. (2020). Panorama de la Salud: Latinoamérica y el Caribe 2020 [Health outlook: Latin America and the Caribbean 2020]. *OECD Publishing*. Available at: <https://www.oecd.org/health/panorama-de-la-salud-latinoamerica-y-el-caribe-2020-740f9640-es.htm>
- Tokudome, S., Hashimoto, S. and Igata, A. (2016). Life expectancy and healthy life expectancy of Japan: The fastest graying society in the world. *BMC Research Notes*, 9, 1-6. <https://doi.org/10.1186/s13104-016-2281-2>
- Torrado-Ramos, A. M., Sánchez-Pérez, L., Somonte-López, R., Cabrera-Marsden, A. M., Henríquez Pino-Santos, P. C. and Lorenzo-Pérez, O. (2014). Envejecimiento poblacional: Una mirada desde los programas y políticas públicas de América Latina, Europa y Asia [Population aging: A look from the programs and public policies of Latin America, Europe and Asia]. *Revista Novedades en Población* [News in Population Magazine], 10(19), 18-29.
- WHO. (2015). World report on ageing and health. World Health Organization. Available at: <https://apps.who.int/iris/handle/10665/186463>

APPENDIX A

The Salutogenic Model of Health, According to Mittlemark and Bull (2013, p. 31), on Permission Approved by Antonovsky



Key to Figure 1

- Arrow A: Life experiences shape the sense of coherence.
  - Arrow B: Stressors affect the generalized resistance resources at one's disposal.
  - Line C: By definition, a GRR provides one with sets of meaningful, coherent life experiences.
  - Arrow D: A strong sense of coherence mobilizes the GRRs and SRRs at one's disposal.
  - Arrows E: Childrearing patterns, social role complexes, idiosyncratic factors, and chance build up GRRs.
  - Arrow F: The sources of GRRs also create stressors.
  - Arrow G: Traumatic physical and biochemical stressors affect health status directly; health status affects extent of exposure to psychosocial stressors.
  - Arrow H: Physical and biochemical stressors interact with endogenic pathogens and "weak links" and with stress to affect health status.
  - Arrow I: Public and private health measures avoid or neutralize stressors.
  - Line J: A strong sense of coherence, mobilizing GRRs and SRRs, avoids stressors.
  - Line K: A strong sense of coherence, mobilizing GRRs and SRRs, defines stimuli as nonstressors.
  - Arrow L: Ubiquitous stressors create a state of tension.
  - Arrow M: The mobilized GRRs (and SRRs) interact with the state of tension and manage a holding action and the overcoming of stressors.
  - Arrow N: Successful tension management strengthens the sense of coherence.
  - Arrow O: Successful tension management maintains one's place on the health ease/dis-ease continuum.
  - Arrow P: Interaction between the state of stress and pathogens and "weak links" negatively affects health status.
  - Arrow Q: Stress is a general precursor that interacts with the existing potential endogenic and exogenic pathogens and "weak links."
  - Arrow R: Good health status facilitates the acquisition of other GRRs.
- Note: The statements in bold type represent the core of the salutogenic model.

## APPENDIX B

Definition of Health, According to Mittelmark and Bull (2013, p. 31), on Permission Approved by Antonosky

Breakdown is any state or condition of the human organism that is felt by the individual to be	<p><i>A. Pain</i></p> <ol style="list-style-type: none"> <li>1. not at all</li> <li>2. mildly</li> <li>3. moderately</li> <li>4. severely</li> </ol>	} painful;
that is felt by him/her to be	<p><i>B. Functional Limitation</i></p> <ol style="list-style-type: none"> <li>1. not at all</li> <li>2. mildly</li> <li>3. moderately</li> <li>4. severely</li> </ol>	} limiting for the performance of life activities self-defined as appropriate;
that would be defined by the professional health authorities as a	<p><i>C. Prognostic Implication</i></p> <ol style="list-style-type: none"> <li>1. not acute or chronic</li> <li>2. mild, acute, and self-limiting</li> <li>3. mild, chronic, and stable</li> <li>4. serious, chronic, and stable</li> <li>5. serious, chronic, and degenerative</li> <li>6. serious, acute, and life-threatening</li> </ol>	} condition;
and that would be seen by such authorities as requiring	<p><i>D. Action Implication</i></p> <ol style="list-style-type: none"> <li>1. no particular health-related action</li> <li>2. efforts at reduction of known risk factors</li> <li>3. observation, supervision, or investigation by the health care system</li> <li>4. active therapeutic intervention</li> </ol>	}.