Salutogenesis and health literacy: The health promotion simplex!

*Luis Saboga-Nunes, Uwe H. Bittlingmayer and Orkan Okan*

**Introduction**

By introducing the Ottawa Charter for health promotion (WHO, 1986), the World Health Organization (WHO) not only changed the public health discourse, but also emphasised new perspectives on personal skills needed for promoting health and wellbeing over the life course. While the Charter highlighted that health promotion is built on an asset-based approach towards health, aiming at enabling people to exert greater control over their life and health, the stream initiated by this drift has enabled two concepts to become the most important subject matters in contemporary international health research: health literacy and salutogenesis. The first is known to be the indicator of the so-called health-related personal skills introduced in the Ottawa Charter (Kickbusch, 1997); the latter, a health paradigm, a complementary approach to the traditional pathological biomedical vision prevailing in the healthcare context (Antonovsky, 1987).

When examining the scientific discourse around health literacy, we are surprised to see that while scholars have been extensively discussing the ‘literacy’ component of the composed term ‘health literacy’, discussion of the ‘health’ element is hardly to be found. Nevertheless, the rich and ongoing discussion on literacy has intersected health. Today, broad literacy concepts addressing functional, interactive and critical literacy are added to the health literacy discourse, giving way to multiliteracies and social literacies to merge with health literacy (see Chapters 14, 18, 36 and 39, this volume). This was not only the impetus for multiple research strains that broadened the theoretical and conceptual discussion, but also facilitated the uptake of health literacy by various research disciplines, such as healthcare, medicine, public health, education, psychology or sociology. In turn, this was fuel to the very engine driving the development of health literacy. Given the fact that discussing one component of health literacy in this detail has had tremendous benefits for understanding the concept, exploring the other part with similar consideration may extend the concept’s frontiers and expand the conceptual discussion surrounding the asset-based characteristic of health literacy that is already being discussed. Whereas the health literacy community provides many different definitions and models – also depending on the underlying scientific
discipline (see Chapters 1 and 2, this volume) – basically health literacy is about searching, understanding, evaluating and using information to promote health and making informed health decisions (Nutbeam, 2000; Nielsen-Bohlman et al, 2004; Sørensen et al, 2012; Malloy-Weir et al, 2016). This conceptualisation is supported by almost all available models and definitions. However, more dimensions and components are associated with the concept, and more discussion is needed in its context of health.

The need to rethink, and maybe also construct, the health component of the health literacy concept and its social representation needs to consider that health can be understood and approached in different ways. In this chapter the salutogenesis paradigm is the guiding health framework. In this context, Antonovsky’s theory of the Sense of Coherence (SOC), serving as the core of the salutogenesis model, has emerged as a promising approach to deal with the complex topic of health today. The building process of the SOC is closely connected to the Generalised Resistance Resources (GRR), where health literacy can be included as a macro-social GRR. Defining health as the epicentre of the human fight against chaos (entropy) propels the individual to acquire or sort out characteristics that will enable them to make choices (from several options) that will determine either a decrease or a relative increase in their health experience towards the maximum ease. Health literacy can therefore play a leading role in a citizen’s consciousness fight against chaos. At the same time, it can contribute to the understanding that there are no continuous and permanent increases in options towards the maximum ease, but that there is a finiteness in humanity, life, the planet and its resources.

The aim of this chapter is, therefore, to explore the health dimension of health literacy while health is approached from an asset-based perspective. As such, we find it most plausible to recognise the salutogenesis paradigm – including the SOC theory – to serve as this asset-based health approach. Health literacy is discussed and placed into the salutogenesis framework as a macro social GRR in the context of the building process of the SOC. This leads to the health promotion simplex – an effort to bring the complexity of health to simple terms.

Public health and the advent of health promotion

In a time when Western societies faced a dramatic shift towards neoliberalism (Dixon, 2000; Bourdieu, 2003; Harvey, 2007; Crouch, 2011; Brown, 2015; Jessop, 2016), the very meaning of health itself needed to be addressed – and is still needed. While the World Health Organization (WHO, 1986) claimed for strengthening individuals’ control over their own health and other life dimensions, by re-orienting settings towards health promotion, the control over the life worlds (German: Lebenswelt) (Husserl, 1970) has decreased significantly for an increasing number of people. To give just one example, the United Nations (UN) mentioned a decade ago that there was ‘a growing sense of unease over the economic course that has been charted in recent years … where increased
economic insecurity has been associated with rising inequality and the squeezing of social provisioning..., intractable poverty has fed a vicious circle of economic insecurity and political instability and, on occasion, ferocious communal violence’ (UN, 2008, p v). Since the 1980s the significant decline of social security in the fields of unemployment, retirement and even health (Crouch, 2004) led to fragmented biographies, increasing feelings of fear and decreasing trust in many countries (Giddens, 1991; Beck, 1994; Berger, 1996; Berger and Konietzka, 2001; Wilkinson, 2005). This lack of congruence between a convincing normative frame for health, based on health promotion and the Ottawa Charter, and the plea for an increment of personal control over life conditions, on the one hand, and the increasing inequities and insecurities for the majority of the working people, on the other (Wilkinson and Pickett, 2008; Piketty, 2014) produces a tension or contradiction that is not easy to address. What is relatively clear against this backdrop is that the rising insecurity and unforeseeability in economic terms leads to an increasing level of chaos on personal and societal levels.

Following the International Conference on Primary Health Care and the ‘Declaration of Alma-Ata’ (WHO/UNICEF, 1978), which defined the goal to reach ‘Health for All’ by the year 2000, up until 2018 the WHO has held nine international conferences on health promotion (see Table 42.1). However, since the Ottawa conference (WHO, 1986), the call for health promotion was echoed six times before Nairobi (WHO, 2009), where the recognition of the existing health gap became another reminder that most of the recommendations have yet to be implemented (Saboga-Nunes, 2012) in order to achieve the mirage proposed at the foundation of WHO (in 1948): the attainment of ‘not only of the absence of disease and infirmity, but the state of complete physical, mental and social wellbeing’ (WHO, 1948). The theme of the Nairobi Conference was ‘Call to action for closing the implementation gap in health promotion’. Its aims were focused on ‘… putting people at the centre of care; … by insisting that health systems provide accessible and comprehensive information and resources for health promotion…’ (WHO, 2009, p 6). In order to achieve this, the need to implement innovative approaches was outlined in five conference working documents. In one of them, Health literacy and health promotion: Definitions, concepts and examples in the Eastern Mediterranean region – Individual empowerment, health literacy is closely articulated with health promotion (Kanj and Mitic, 2009). In the following two conferences in Helsinki in 2013 (WHO, 2013) and Shanghai in 2016 (WHO, 2017), health literacy assumes a central standing in the overall achievement of the Sustainable Development Goals (SDGs) and to increase empowerment and equity (WHO, 2017).

From New York in 1948 (WHO, 1946) to Shanghai in 2016 (WHO, 2017), 70 years went by, with new epistemological insights that have helped to shape contributions through which health promotion principles and strategies have become clearer in the midst of increasing complexity. These are considered of significant value in improving the promotion of health. Nevertheless, simultaneously, limitations are increasingly being perceived, affecting short-,
medium- and long-term health promotion. The ambition of healthcare systems, or more accurately stated, disease and treatment systems, the development of an International Classification of Diseases (ICD) (WHO, 2016) and of a specific arsenal of technology, along with the growth of the medications and interventions industry, has, in most countries of the world, absorbed all available resources that societies agreed to set apart for this purpose. The cost of disease and treatment systems is increasingly competing with other crucial areas (like health promotion) of social need in the search for cohesion and stability (for example, justice, security and education), where social and cultural sustainability are (with environmental sustainability) pushed to enduring treats.

### Public health and the pathogenesis complexity

Today, greater expectations are expressed by patients regarding the systems for treatment of disease. This has resulted in increasingly vocal complains regarding depersonalisation and compartmentalisation of care. The citizen-centric approach (another golden rule of modern public health) has been compromised. On the other hand, these systems have become so expensive that it seems an impossible mission (if nothing is changed) to achieve the golden rule of health for all. The idea of modernity, of the infinite expansion of the curative dis-ease human experience, so that it will eventually embrace every human being, has been shown to be
very finite, and in some ways, a receding horizon (as new dis-eases and menaces are emerging at an alarming rate). The limits are in sight and compromising the current model of human development within the SDGs perspectives. The mirage proposed by the pathogenic paradigm, while demanding ever-expanding complexity and means, has revealed abundant limitations.

At the nine WHO consensus meetings (referred to above), and although they have been acclaimed around the world as noble, it is unquestionable nowadays that more is needed than admirable declarations. At the epicentre of this ‘tornado of needs’ are the concepts of health, illness, sickness and disease. Health promotion (with a few notable exceptions) continues to be mostly a declaration of intentions, and the lack of theoretical developments is jeopardising the deficiency of further developments into the practical consequences of the health promotion ideology.

**Salutogenesis and the quest for a theory of health promotion**

Health promotion, basically a dynamic ‘process that focuses on people’s empowerment, in order to facilitate their control over their health’ (WHO, 1986), has been declared a missed opportunity for most of the inhabitants of the world (WHO, 1984), mostly because a good theory that would maximise its potential was missing. This caught the attention of Aaron Antonovsky (1985). He started his quest by posing an unusual research question (outside of the pathogenic paradigm). Instead of focusing on traditional approaches, he asked: *Why do certain people suffer less than others?*

From this starting point, he caught worldwide attention while proposing the salutogenesis paradigm as the answer. It could be said that this was so successfully done that today salutogenesis has become, in some contexts, a buzzword that is ubiquitously used without much concern and sometimes void of its deep meaning. For instance, in some cases the term ‘salutogenesis’ is aligned closely with the concept of resilience or coping (Antonovsky, 1987; Johnson, 2004; Harrop et al, 2007; Langeland et al, 2007). In social-psychological approaches, the core of Antonovsky’s theory, the SOC, is predominantly used to forecast empirically individual general health status, particular health outcomes or health choices. The value of the salutogenesis paradigm and the sense of coherence is often reduced to its explanatory power as an independent variable to a variety of different outcomes. Simultaneously, salutogenesis is accused of not being tested enough empirically (Bengel et al, 2001); it is a shortfall to use the salutogenesis predominantly as an empirical tool. Although there are undoubtedly open questions and a need for advancement and progress in the salutogenesis paradigm, the most valuable aspect of it is the holistic theoretical impact.

**The health promotion 3-simplex and the sense of coherence theory**

Antonovsky’s innovative way of looking at health (ease) and its menaces consequence (dis-ease) is not focused on building the perfect health condition (ease). It is not a
recipe for a perfect world, but rather a *modus vivendi*, a way of living in this one with the potential for health (*ease*) that each person has, while being empowered to improve it. Antonovsky was not looking towards a state of a total or perfect health (besides the absence of *dis-ease*), but pointing a finger towards the natural condition of every human being: fighting the chaos of everyday life, managing stressors in a healthy (*ease*) way. While he dealt with complexity through a simplex approach, he *glued together* simplices to form a simplicial complex (for example, a tetrahedron, a 3-simplex).

Life is a negentropic asset – every breath, action and move catalyses order from the chaotic circumstances of everyday life. The basic question is then: *Why do some people do this better than others?*

Thus, the point of departure is not the search for what is pathological. Instead, it is the direction toward life (*salus*), the teleonomic perspective that every being has inscribed in their most basic behaviour to fight entropy. In this way, strengths are identified – the positive factors that allow individuals to use their resources to move to the next level of *ease* (wellbeing), despite prevailing conditions. For Antonovsky, life is permanent coping ability, dealing with events, people and environment. These elements have to be coherently arranged in order to promote health and wellbeing. What a person is, is not as important as what they believe they are, and thus a person finds sense in their own life. Life events are arranged by everyone according to specific frames and organised according to basic ideas of what life is, what others are and what things represent. Therefore, since life is basically *salus* or *vita*, and the opposite of this is *morbus* or *mors* (death), people in their struggle for survival search for those salutary elements that will enable their *salus*, which is their *ease* or wellbeing. This is the basis of the salutogenesis paradigm in the search for the origins of health. The departure point of the search for salutary factors, in terms of the information theory, is the search for negentropy. Negentropy could be considered as the vertex to all original vertices, where the 3-simplex originate from.

Antonovsky’s salutogenesis paradigm (Antonovsky, 1985) is built on the key concept of the SOC as the centre of life control (Antonovsky, 1987). This theory proposes answers to the *salutogenic question* – considered as the motivational basis of any behaviour enacted and attitude held by an individual or a group. The SOC, as a global orientation to the world, perceives it *comprehensible, manageable* and *meaningful*. This is a 3-simplex. The SOC is a central dispositional orientation in the lives of all human beings that thrive in the dis-ease–ease continuum.

These are the three components of what the SOC represents, the core of health promotion theoretical conceptualisation in this approach. The SOC, then, can be defined formally as:

> a global orientation that expresses the extent to which one has a pervasive, enduring though dynamic feeling of confidence that (1) the stimuli [for example, need to control weight] deriving from one’s internal and external environments are structured, predictable
and explicable; (2) the resources [for example, for weight control] are available to one to meet the demands posed by these stimuli; and (3) these demands are challenges, worthy of investment and engagement [for example, it pays to have normal weight]. (Adapted from Antonovsky, 1987, p 40)

The importance of this paradigm is shown by the inclusion of this perspective in the WHO Health for all guidelines (WHO, 1999, pp 28-9): ‘environments [that are] created that help people to gain a sense of coherence and cope with stressful situations and events.’ The recognition by the WHO of Antonovsky’s proposal emphasises the relevance of his own words, written 10 years earlier (Antonovsky, 1987, p 19).

**From the simplistic duality to the dis-ease/ease health continuum**

People throughout their lives confront a variety of tasks shaped by biological, historical and psychosocial forces; the more successful they are in resolving these tasks, the more likely they are to maintain or improve their places on the health dis-ease/ease continuum (Antonovsky, 1987, p 3). The SOC is a significant determinant of such success and plays a major role in health promotion (Antonovsky, 1987, p 19). At one of the extremities of this continuum is disease (disfunctionality) and at the other extreme is ease (maximum functionality). People move on this continuum experiencing more or less ease in their everyday lives (Saboga-Nunes, 1998).

The assumption is that everybody is in a permanent state of heterostasis – in other words, of imbalance, disorder or instability (Antonovsky and Bernstein, 1986; Antonovsky, 1987, p 130). Everyone is submitted to pressure toward increasing entropy as the ‘prototypical characteristic of the living organism’ (Antonovsky and Bernstein, 1986, p 2). Instead of considering homeostasis, of the biomedical model (Cannon, 1939) or self-regulated processes (the prevalent perspective during the time Antonovsky started to reflect about his theory), every effort in life is concentrated on moving toward less entropy in heterostasis (Noack, 1997, p 95). A metaphor often used by Antonovsky compared life to a river, which he called the river of life:

> my fundamental philosophical assumption is that the river is the stream of life. None walks the shore safely…. Wherever one is in the stream … what shapes one’s ability to swim well? (Antonovsky, 1987, p 90)

From the salutogenic perspective, what is also important is to understand that people can be in the water and yet survive with their particular skills. It is therefore important to understand how the personality disposition that Antonovsky called the SOC allows people to fare in the water, some managing better than others, since life is an imbalanced state. The normal condition is not balance and health
(in the sense of the WHO definition of health) but imbalance (heterostasis), which leads to suffering and sometimes to dis-ease.

This is the context in which Antonovsky utilises the concept of entropy; the question is then how to contribute to counteracting this natural law of degradation, which can be considered as the vertex of life. This is called negentropy, or negative entropy, where a system can reorganise itself again, a characteristic that Antonovsky attributes to humans, as complex systems in the midst of other systems: ‘The human organism is a system and, like all systems, it is at the mercy of the power of entropy’ (Antonovsky, 1993, p 7). Consequently ease (or health) is a permanent building process, as it can be jeopardised by a process of loss and degradation (dis-ease) (1993, p 10).

Uniting the dots for the health continuum: the role of the General Resistance Resources

Following this approach, Antonovsky researched for factors that were connected to the ease pole of the continuum (dis-ease/ease), looking for what was contributing to the health condition of individuals. He called these factors Generalised Resistance Resources (GRR) (Antonovsky, 1985, 1987, pp 18, 19, 28): ‘phenomena that provide one with sets of life experiences characterized by consistency, participation in shaping outcomes and an underload-overload balance.’

The GRR are generally present at the disposal of humans, in different types of conditions. They contribute to reinforcing a person’s resistance to facing the stream of life, which promotes negentropy, and so they are called resistance. These GRR help to make sense out of the countless stressors that a person is submitted to. This is what originates the personal SOC. In 1987, Antonovsky characterised stressors as Generalised Resistance Deficits (GRD) (Antonovsky, 1987). This meant that the move to the ease pole was geared with life experiences that strengthened the SOC, while negative experiences would lead to the other, dis-ease pole, which weakens the SOC. In this way GRR contributed to increasing the amount of entropy and GRD worked to increase the amount of negentropy, that is, to increase the SOC that ‘orchestrates this battle-ground of forces promoting order or disorder’ (Antonovsky, 1987, p 164). A move from pathogenesis can be experimented with GRR, using, for instance, immunology and microbiologic models, where pathogens are fought by internal defences or by external immunology (such as vaccines). From a pathogenic behaviour model, in which lifestyles are considered as direct causes of disease and death (Antonovsky, 1984), a change can be considered in the context of the salutogenic model.

In order to cope well, people’s ‘readiness and willingness to exploit the resources that they have at their potential disposal’ (Antonovsky, 1984, p 121) is critical. This is where the dots are united towards ease. It is essential to believe that the input from one’s environment and the feedback is information and not noise or, in simple words, that life makes sense. This is called comprehensibility, the first dimension of the SOC (Antonovsky, 1987, p 16) (or the first simplex). The belief
that stimuli make sense, are ordered, structured and predictable is essential but not sufficient for the individual to cope well. People not only have to know the rules, have the information for living healthy but must also have confidence in the resources at their disposal. They have to reject the idea that the cards of life are stacked against them, and that consequently they can never stop. The stimuli, or the stressors, are always there, making demands. But if people are persuaded that a variety of appropriate resources to meet these demands are available, then a person can cope well and move towards the ease end. This second component/dimension of the SOC is defined as manageability (Antonovsky, 1987, p 17) (or the second simplex). To believe that people understand what it means is a life-promoting strategy and that they can manage its process is not enough. The motivational element is crucial. People must wish to cope with life events and build positive life experiences. They must see the demands posed by the stimuli as making sense emotionally. The stimuli may be painful and sad. They can fall into despair or be determined to continue the struggle. This third component of the SOC is called meaningfulness (see Figure 42.1) (Antonovsky, 1987, p 18) (or the third simplex).

Everyday life experiences determine the SOC (Arrow A, see Figure 42.1). Comprehensibility, manageability and meaningfulness are precursors of an individual’s actions (the 3-simplex). If these life experiences are comprehensible, manageable and meaningful, this will generate (Arrow B) GRR, which will, in turn, shape new life experiences (Arrow C) that contribute to wellbeing (at the ease pole of the continuum). These experiences are based on sources of GRR (Arrow D) that are events or perceptions without a pre-established pattern: they can be used and mobilised depending on the building up of SOC that everybody experiences (Figure 42.1).

There is another pathway that can be triggered by (Arrow E) sources of GRD that are implicated in the development of GRD (Arrow F) that shape negative life experiences, leading the affected person to the pole of dis-ease, when tension management has been unsuccessful (Arrow G). This leads to increased entropy.

The SOC theory is one of the contributions that the salutogenic paradigm has sustained while responding to the public health goal of fostering healthier citizens and communities. For some researchers, salutogenesis is in itself equal to health promotion (Freidl et al, 1995, p 16).

From the cycle of knowledge to the core of the health literacy concept as General Resistance Resource

As referred to earlier, health literacy was brought to the health promotion field, more emphatically, in Nairobi. Bengt Lindstrom and Monica Eriksson (2011, p 90) ‘introduce[d] the salutogenic framework in educational science by starting a discussion about the content of health education and health literacy expanding towards healthy learning, with the emphasis on healthy, giving a direction similar to the salutogenesis.’
During the last 20 years, many proposals have emerged to clarify this concept (that is, health literacy) and its operationalisation. Among the many definitions to date, we consider the one that states that ‘health literacy is linked to literacy and entails people’s knowledge, motivation and competences to access, understand, appraise, and apply health information in order to make judgments and take decisions in everyday life concerning healthcare, disease prevention and health promotion to maintain or improve quality of life during the life course’ (Sørensen et al, 2012, p 3).

This definition has a core node where sits all the argument of what is meant by health literacy and that could be made explicit with the cycle of knowledge (Sørensen et al, 2012). This cycle that aims at the pursuit of health information starts with (1) access that ‘refers to the ability to seek, find and obtain health information’. Next, it focuses on the (2) understanding of health information ‘that is accessed’. On a third step this health information needs to be (3) appraised, which means the ‘ability to interpret, filter, judge and evaluate the health information that has been accessed’. Finally, health information needs to be (4) applied, that ‘refers to the ability to communicate and use the information to make a decision to maintain and improve health’ (Sørensen et al, 2012, p 9).

These are seen as actions that are based on competencies, skills or abilities and they represent dimensions of health literacy (Sørensen et al, 2012). When a closer analysis of these dimension is considered it can be emphasised that they are in parallel with the 3-simplex dimensions of the SOC theoretical model: indeed, after
obtaining and accessing health information, its *understanding* represents a parallel with the first dimension of the SOC, that is, *comprehensibility* (see Figure 42.2). Understanding something will deploy meaning, and will counteract a person’s entropy, in a world of multiple levels of information that may be inaccessible or contradictory. This way the stimuli will apprehend meaning and will be considered as components of an ordered environment, which is defined as *comprehensibility*. Appraising information as introduced earlier is in parallel with the *meaningfulness* dimension of the SOC (to interpret, filter, judge and evaluate the health information – to create meaning and sense based on information). Applying information is closely linked to *manageability* of the SOC (to communicate and use information and make decisions based on the information).

Moreover, this parallel of health literacy with the theoretical approach of the SOC that sees in the GRR the foundation to its building (or the dots connecting the road map to the ease pole of the continuum) extends the list of the GRR. As referred to before, GRR covers the characteristics of a person (or a community) that enable the individual’s skills to handle successfully life events and stressors, and ultimately are the basic foundation of any person’s SOC development. For Antonovsky, the GRR can be systematised in eight groups, such as physical; biochemical; artefactual–material; cognitive; emotional; valuative–attitudinal; interpersonal–relational; and macro–sociocultural (Antonovsky, 1985, pp 102–19). Health literacy is therefore a macro–sociocultural GRR. It is one component to be added to the list of the GRR, that embraces the all set of characteristics that will enable a person to activate skills, that will contribute to handle life events successfully, and move toward the ease end of the continuum.

To have a strong health literacy will contribute to having a person higher positioned on the continuum dis–ease–ease. In addition, it will contribute to a higher level of SOC, since it will add to having consistent, balanced life experiences with high participation in decision-making. On the opposite side, a person who is lower in health literacy levels will face misunderstanding, inconsistences with low balanced life experiences and low participation in decision-making – the core of the health promotion goal.

**Conclusion**

Today scepticism, finitude, plurality, textuality and difference have embraced the health field. Consciousness about limits has given place to the certitude that there is no permanent, endless expansion, even for ending dis–ease. Therefore, the need to reconstruct the health field and its social representation needed the salutogenesis new paradigm. Inside this paradigm several theories made emphatically how health can be created; in this context Antonovsky’s theory of the SOC has emerged as a promising approach, in the last 20 years, to deal with the complex topic of health today. The building process of the SOC is closely connected to the GRR, where health literacy can be included as a macro social GRR. The current comprehensive discourse about health literacy is maybe (and hopefully)
Figure 42.2: The salutogenic perspective placed into the health literacy framework

Source: Adapted Sorensen et al (2012)
a trigger to bring the salutogenesis paradigm to the forefront in the need to reconstruct the health field and its social representation (Mittelmark et al, 2016; Saboga-Nunes, 2016).

To keep a greater picture in mind, humanity is finite either because life is limited, or because humans rely on external resources that are limited and thus might threaten human life when they run out. Such resources are the bedrock of human life and also their health, and without wise management of these finite resources, human sustainability can be severely damaged, leading to chaos or quasi chaotic states. The choices people make will determine the future path of humanity (for example, by continuing to use fossil energy we will see an increase in the negative consequences on human health and planet degradation; without an urgent change in consumption patterns and industrialisation, we will be destroying rain forests, the oceans, or heavily polluting the soils and water supplies). This is where health literacy can make an impact to protect human flourishing and development by making appropriate micro-, meso- and macro-level health decision, especially at the policy-making, decision-making and power levels.

References


