3 Salutogenesis as a Theory, as an Orientation and as the Sense of Coherence

Maurice B. Mittelmark and Georg F. Bauer

Introduction

In the health promotion field, the term salutogenesis is associated with various meanings that Aaron Antonovsky introduced in his 1979 book *Health, Stress and Coping*, and that he expounded in many subsequent works. In its most thoroughly explicated meaning, salutogenesis refers to *the salutogenic model of health*, which posits that life experiences help shape one's sense of coherence—an orientation towards life as more or less comprehensible, manageable and meaningful. A strong sense of coherence helps one mobilise resources to cope with stressors and manage tension successfully. Through this mechanism, the sense of coherence helps determine one's movement on the health ease/dis-ease continuum.

In its narrower meaning, salutogenesis is often equated with one part of the *model*, the *sense of coherence*, specifically defined as:

> a global orientation that expresses the extent to which one has a pervasive, enduring though dynamic feeling of confidence that one's internal and external environments are predictable and that there is a high probability that things will work out as well as can reasonably be expected. (Antonovsky, 1979, p. 123).

In its most general meaning, salutogenesis refers to a *salutogenic orientation,* particularly in health promotion research and practice, focusing attention on the origins of health and assets for (positive) health, contra to the origins of disease and risk factors.

These meanings are distinct yet inextricably intertwined. The heart of the salutogenic model is the sense of coherence, a 'global orientation'easily conflated with the 'salutogenic orientation' since the concept of orientation is central to both. A helpful distinction is that 'orientation' in relation to the sense of coherence has relevance for all humans' ability to engage resources to cope with stressors. In contrast, 'orientation' in relation to salutogenesis refers to professionals' interest in the study and promotion of the origins of health and assets for health rather than tackling the origins of disease and risk factors.

This book is about salutogenesis in all these meanings—the salutogenic model, the sense of coherence and the salutogenic orientation. These meanings and their reception in research and practice are taken up in this chapter to set the stage for the chapters that follow. We also briefly discuss salutogenesis in relation to other concepts within and beyond the health arena, with which salutogenesis has important kinship.

The Salutogenic Model

By his own account, the turn in Antonovsky's life from pathogenesis to salutogenesis began to crystallise in the late 1960s. Having worked up to that point as a stress and coping survey researcher with foci on multiple sclerosis, cancer and cardiovascular diseases, he realised that his real interest did not have its starting point in any particular disease. Instead, the starting point was *'the illness consequences of psychosocial factors howsoever these consequences might be expressed'* (Antonovsky, 1990, p. 75). This insight led to research and publications on the ideas of 'ease/dis-ease' (breakdown) and generalised resistance resources. Still, it did not mark the full emergence of salutogenesis in his thinking. At this stage of his career, Antonovsky's focus was still pathogenic (ibid, p. 76). Another decade would pass before

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M. B. Mittelmark (✉)
Department of Health Promotion and Development, Faculty of Psychology, University of Bergen, Bergen, Norway
e-mail: maurice.mittelmark@uib.no

G. F. Bauer
Center of Salutogenesis, Division of Public and Organizational Health, Epidemiology, Biostatistics and Prevention Institute, University of Zürich, Zürich, Switzerland
e-mail: georg.bauer@uzh.ch

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Antonovsky came to the question *'what makes people healthy?'* and the need to coin the term salutogenesis to convey the thinking mode implied by the question. The time and space to develop these ideas came while he was on sabbatical at Berkeley in 1977 and 1978.

The fruition was Antonovsky's full exposition of salutogenesis in *Health, Stress and Coping* (Antonovsky, 1979), the publication of which completed his turn from pathogenesis to salutogenesis. Antonovsky's illustration of the salutogenic model is reproduced in Fig. 3.1. Up until the 1979 book, no research based on the salutogenic model had been undertaken. The model's core construct, the sense of coherence, had yet to be fully developed, operationalised and measured, and it was to this task that Antonovsky turned his effort. As a result, his book *Unraveling the Mystery of Health* (Antonovsky, 1987) focused a great deal of his attention on the sense of coherence and its role as an independent variable in health research (Eriksson & Lindström, 2006, 2007). Other aspects of the salutogenic model received less attention. Antonovsky's ambitions for further development of the salutogenic model were cut short by his death at age 71, just 7 years following the publication of *Unraveling the Mystery of Health*.

Health professions and disciplines have yet to be powerfully touched by salutogenesis, even if Antonovsky was professionally situated in a medical school during all the years he developed salutogenesis. The venerated *Dorland's Illustrated Medical Dictionary*, in print since 1900 and now in its 33rd Edition, does not even have an entry for salutogenesis, much less the salutogenic model (Dorland, 2020).

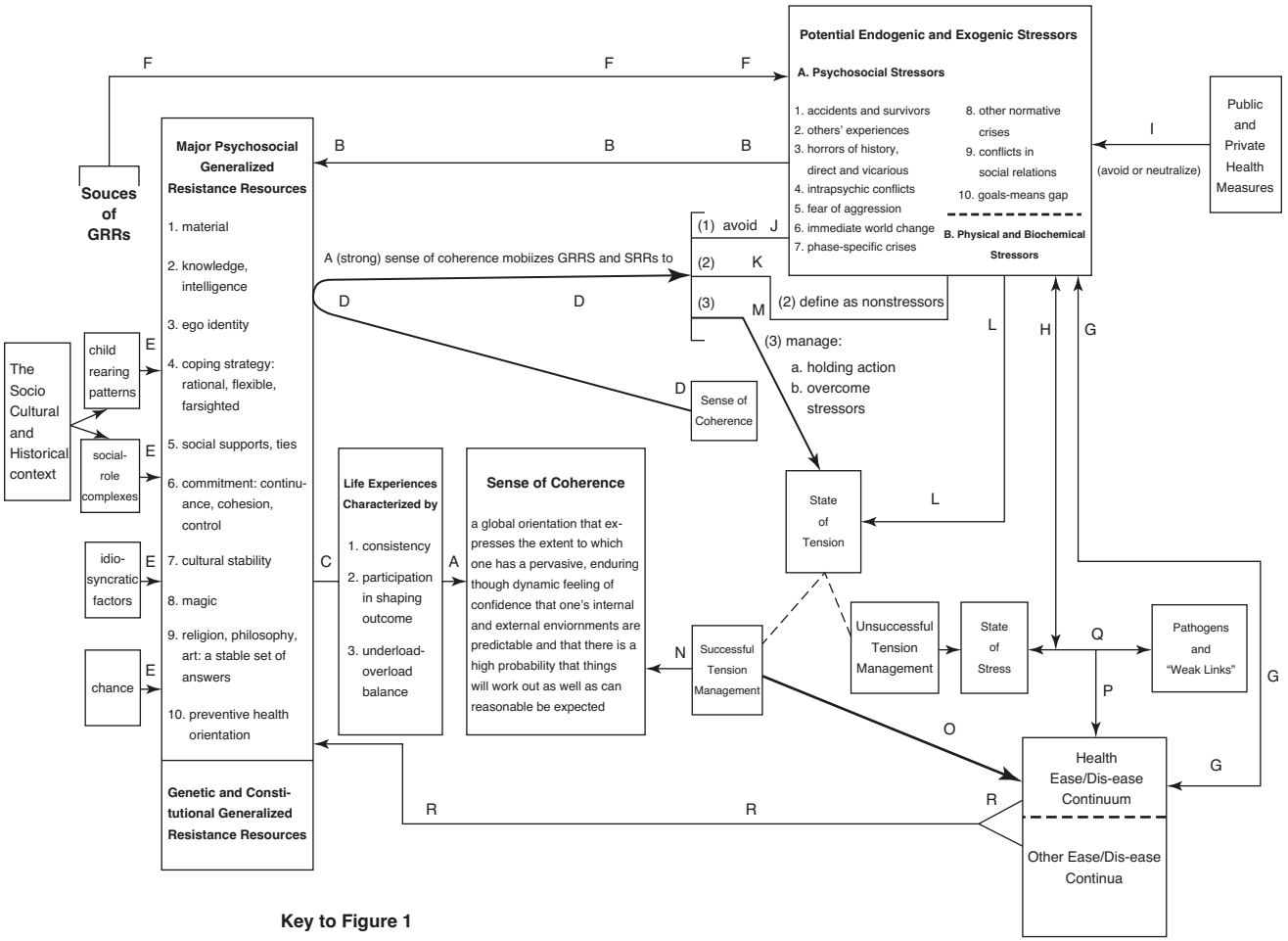
The salutogenic model has not yet deeply penetrated social science or medicine; this does not mean that there is no penetration, and the chapters of this book are evidence that certain health-related arenas are captivated. Many scholars who *do* refer to the salutogenic model stray far from its main ideas. Interest in the model's details is watered down by the sweeping generality of the salutogenic orientation, and by the intense interest the sense of coherence awakens. Four aspects of the salutogenic model that require attention are mostly neglected: (a) the origins of the sense of coherence, (b) other answers to the salutogenic question than the sense of coherence, (c) health defined as something other than the absence of disease and (d) processes linking the sense of coherence and health.

The sense of coherence develops from infancy. Antonovsky wrote extensively about the roles of culture in salutogenesis and the development of the sense of coherence (Benz et al., 2014). His writings included attention to the role of culture in shaping life situations, in giving rise to stressors and resources, in contributing to life experiences of predictability, in load balance and meaningful roles, in facilitating the development of the sense of coherence and in shaping perceptions of health and well-being (ibid). With almost the sole exception of work by Israelis, culture is not a theme in salutogenesis research (see, e.g. Braun-Lewensohn & Sagy, 2011; Sagy, 2015). One might protest and point to the plethora of studies that have translated sense of coherence questionnaires. Still, such research is not the study of the cultural forces to which Antonovsky called attention.

Stepping up the salutogenic model's ladder, cultural and historical context is understood as a cauldron generating psychosocial stressors and resistance resources. The processes involved are little studied. Which psychosocial resources are predictably generated by which child-rearing patterns, which social role complexes and their interaction? Is it the case that generalised resistance resources are of prime importance to developing the sense of coherence as Antonovsky maintained, and which are of most importance during which life stages? Do specific resistance resources (SRRs) also play a vital role? How does the experience of stress affect the shaping of resistance resources? Unaddressed questions about the origins of the sense of coherence abound.

Moving on to the issue of *other answers to the salutogenic question than the sense of coherence*, Antonovsky invited others to search for them, even if his interest remained firmly with the sense of coherence. The question is this: What factors (presumably besides the sense of coherence) intervene between the stress/resources complex on the one hand and the experience of health on the other hand? A convenient way to partition the question is with the intra-person/extra-person differentiation. The sense of coherence is an intra-person factor; which other intra-person factors may be important? There are many candidates (hardiness, mastery and so forth), but little effort to compare and contrast their mediating and moderating roles with the sense of coherence *in the same research designs*.

As to extra-person salutary factors, there is at least movement in promising directions. In the work and health literature specifically, and in the settings literature more generally, interest is growing in how physical and social environments can enhance well-being and performance. Such research is attentive to the sociocultural environment, not as a force in shaping the sense of coherence, but as a mediating factor, which may facilitate coping. In the health promotion area, this is referred to as 'supportive environments'. A fundamental precept is that health-enhancing social policy should create supportive environments. An example of a salutary extra-person factor is work and family corporate support policy, which is an SRR related positively to job satisfaction, job commitment and intentions to stay on the job (Butts et al., 2013). Most interestingly, it may be that the perceived availability of support under such policy, rather than the *use* of supports, is the critical factor in good job-related outcomes (ibid). Concerning GRRs at work, Brauchli et al. (2015) identified key job resources relevant for health outcomes across a broad range of diverse economic sectors,



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 mobllizes 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 lhe 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.

Fig. 3.1 The salutogenic model of health. (Reprinted from Antonovsky, 1979. Published with permission of © Avishai Antonovsky. All Rights Reserved)

companies and professions. Furthermore, they showed that independent from one's hierarchical position, gender or age, job-related GRRs both protect from negative consequences of work-related stressors (job demands) and directly promote positive health outcomes such as work engagement. The last finding points to the fact that positive health development works not only through the originally postulated salutogenic path of coping but also through GRRs promoting positive health outcomes.

Moving to *health defined as something other than the absence of disease*, the definitions of health evident in the salutogenesis literature are not as specified initially in the salutogenic model of health (Mittelmark & Bull, 2013). Research articles reporting on the relationship of the sense of

coherence to a wide range of single disease endpoints fail to note that this is a departure from the salutogenic model's specifications. In contrast, Antonovsky had described the degree of pain, functional limitation, professional prognosis and need for treatment as four broader criteria to assess the movement towards the ease end of the health ease/dis-ease continuum. However, these criteria still define health in negative terms—health is the absence of those four negative qualities. In contrast, health promotion researchers and practitioners applying the salutogenic orientation focus on positive health outcomes—the presence of perceived well-being or fulfilment.

Finally, moving to the issue of *processes linking the sense of coherence and health*, the salutogenic model posits that the sense of coherence helps a person mobilise GRRs and SRRs in the face of psychosocial and physical stressors. This may end with stressors: (1) avoided, (2) defined as non-stressors, (3) managed/overcome, (4) leading to a tension that is managed with success (and enhancing the sense of coherence) or (5) leading to unsuccessfully managed tension. These outcomes impact one's movement on the ease/dis-ease continuum, but what mechanisms link the sense of coherence and movement on the continuum? The sense of coherence is postulated as an orientation towards the appraisal of stimuli, not as a cognitive or emotional mechanism that converts information about stressors and resources into coping responses. What *else* happens in the brain that lies between the sense of coherence and coping responses? This is a little-studied question, surprising since the appraisal of stimuli plays a considerable role in the salutogenic model.

The discussion above suggests some areas of neglected development of the salutogenic model. Why is the model relatively neglected? One obvious answer is its newness and complexity; another is that Antonovsky himself did not pursue the whole complex model's empirical testing. Instead, he focused on the sense of coherence that he considered as the key concept, and even as the ultimate dependent variable in salutogenic thinking. Thus, it is not surprising that many other scholars have followed his inspiring leadership and focused on studying the sense of coherence part of the model. Another explanation might be that the salutogenic model is still incomplete (Bauer et al., 2019). As mentioned above, beyond the coping path, one would need to add a direct path of positive health development leading from generalised promoting (not resistance) resources to positive health outcomes. In his last paper, Antonovsky (1996) introduced the idea of 'salutary factors that actively promote health'. Simultaneously, such an expanded salutogenic model would better capture the salutogenic orientation with its focus on resources/assets and (positive) health outcomes going beyond the absence of disease.

Salutogenesis as the Sense of Coherence

Antonovsky situated salutogenesis as a question: what are the origins of health? His answer was the sense of coherence. The question and this answer comprised the heart of his salutogenic model as just discussed. Antonovsky invited other answers to the salutogenic question while remaining convinced that his answer was fundamental. The way Antonovsky posed and answered the question of salutogenesis was challenging. 'Origins'—he used the plural form—signal the possibility of multiple health-generating determinants and processes. His singular answer—the sense of coherence—suggested a channelling of all salutogenic processes through a particular mental orientation. This answer provides an appealing reduction of complexity compared to the concept of pathogenesis, with its legion of risk factors:

> A salutogenic orientation , I wrote, provides the basis, the springboard, for the development of a theory which can be exploited by the field of health promotion […] which brings us to the sense of coherence (Antonovsky, 1996).

He considered the sense of coherence as the fundamental concept of the salutogenic model. We say no more about the content of the sense of coherence idea here, referring the reader instead to Part III of this book, which is devoted to the topic. Instead, we focus on why the sense of coherence has been overriding as the answer to the salutogenic question. Why is the sense of coherence equivalent in meaning to salutogenesis for so many scholars?

Firstly, Antonovsky strongly signalled that of all the salutogenic model's aspects, the sense of coherence deserved special attention. In his influential 1996 paper in Health Promotion International, Antonovsky proposed a research agenda consisting *solely* of sense of coherence questions:

- 'Does the sense of coherence act primarily as a buffer, being particularly important for those at higher stressor levels, or is it of importance straight down the line?
- Is there a linear relationship between sense of coherence and health, or is having a particularly weak (or a particularly strong) sense of coherence what matters?
- Does the significance of the sense of coherence vary with age, for example, by the time the ranks have been thinned, and those who survive generally have a relatively strong sense of coherence, does it still matter?
- Is there a stronger and more direct relationship between the sense of coherence and emotional well-being than with physical well-being?
- What is the relationship between the person's movement toward well-being and the strength of his/her collective sense of coherence?
- Does the sense of coherence work through attitude and behaviour change, the emotional level, or perhaps, as sug-

gested by the fascinating new field of PNI (psychoneuroimmunology), from central nervous system to natural killer cells?' (Antonovsky, 1996, pp. 16, 17).

Notably, some of these questions focus on neglected issues discussed in the paragraphs above on the salutogenic model. Antonovsky's focus on the sense of coherence was clear, which undoubtedly influences subsequent generations of salutogenesis researchers' choices.

Besides the importance of Antonovsky's lead, the sense of coherence has the charm of relative simplicity: it suggests that all salutogenic processes are channelled through a measurable global life orientation. Thus, this single, focused concept reduces complexity. Further, the sense of coherence concept has high face validity for both researchers and populations to which it is applied. It makes immediate sense that perceiving life as comprehensible, manageable and meaningful is conducive to health. It is also supposedly more complete and generalisable, and not culture bound, in contrast to concepts such as internal locus of control and mastery. The combination of cognitive, behavioural and motivational components positions the sense of coherence uniquely, and they are all measurable.

This last point that the sense of coherence is appealingly measurable may be the most significant reason for its centre-stage position in the salutogenesis literature. In the prestigious journal *Social Science and Medicine*, Antonovsky (1993) published a paper titled *The Structure and Properties of the Sense of Coherence Scale*, cited as of this writing by over 2500 publications, a momentous achievement. Within just a few years, Antonovsky's sense of coherence scale had been used in 'at least 33 languages in 32 countries with at least 15 different versions of the questionnaire' (Eriksson & Lindström, 2005). The stream of sense of coherence measurement papers has continued unabated (Rajesh et al., 2015).

Thus, it is understandable that, for many, salutogenesis is synonymous with the sense of coherence: it is Antonovsky's answer to the salutogenic question, it was his sole priority for further research and sense of coherence measurement has scientific importance. Still, several lines for future advancement of the SOC concept have been identified (Bauer et al., 2019).

The Salutogenic Orientation

In his last paper, published posthumously, Antonovsky (1996) wrote:

> I was led to propose the conceptual neologism of salutogenesis—the origins of health—(Antonovsky, 1979). I urged that this orientation would prove to be more powerful a guide for research and practice than the pathogenic orientation.

Was Antonovsky predicting a paradigm shift? It is important to note that the 1996 paper cited above was directed at the field of health promotion, which Antonovsky felt had too whole heartedly accepted pathogenesis thinking and disease prevention via risk factor reduction. Expressing his hopes for 'proponents of health promotion,' Antonovsky wrote that the salutogenic orientation might help them 'carve out an autonomous existence—though one undoubtedly in partnership with curative and preventive medicine' (Antonovsky, 1996). Not so much a complete paradigm shift from pathogenesis *to* salutogenesis, Antonovsky wished to foment a shift to salutogenesis as a viable theory basis and an essential supplement to pathogenesis in the health and social sciences (Mittelmark & Bull, 2013). In introducing the salutogenic orientation, Antonovsky referred explicitly to Thomas Kuhn's (1962 and 2012) idea of paradigmatic axioms, which need to change for a paradigm shift to emerge. His thoughts were on:

> …the axiom … which is at the basis of the pathogenic orientation which suffuses all western medical thinking: the human organism is a splendid system, a marvel of mechanical organisation, which is now and then attacked by a pathogen and damaged, acutely or chronically or fatally (Antonovsky, 1996).

Challenging this axiom, Antonovsky summarises the essence of the salutogenic orientation in contrast to the pathogenic orientation (Antonovsky, 1996):

- In contrast to the dichotomous classification of pathogenesis into healthy or not, salutogenesis conceptualises a healthy/dis-ease continuum.
- In contrast to pathogenesis' risk factors, salutogenesis illuminates salutary factors that actively promote health.
- In contrast to focusing on a particular pathology, disability or characteristic of a person, salutogenesis might work with a community of persons and relate to all aspects of the person.

We return to our earlier question, slightly rephrased: was Antonovsky calling for a paradigm shift *from* pathogenesis *to* salutogenesis? Certainly not in the sense of salutogenesis as the usurper of pathogenesis. He repeatedly remarked that pathogenesis would remain dominant in the 'health' arena. However, he did hope that salutogenesis would achieve an ascendant position as *the* theory of health promotion. This is not yet achieved but salutogenesis is on the rise. The Health Development Model (Bauer et al., 2006) is a prominent framework for developing health promotion indicators, and it explicitly incorporates aspects of both pathogenesis and salutogenesis. If the paradigm shift concept is not too grand to apply, we could say that the shift is to a paradigm that incorporates pathogenesis and salutogenesis. Even if modest so far, this shift is perhaps the most promising contribution of the salutogenic orientation to the health and social sci-

ences. Compared to other concepts relevant to a search for the origins of health, such as assets, resources, coping and resilience, salutogenesis is in a sense a complete concept, offering a new outlook on health outcomes, health determinants and health development processes. For many health promotion researchers, using the term 'salutogenesis' communicates at a minimum that one pursues an alternative, complementary approach to pathogenesis.

Many health resources and assets concepts (e.g. social support, the sense of coherence, self-efficacy, hardiness and action competency) have kinship under the salutogenesis umbrella (Eriksson & Lindström, 2010). The umbrella also covers diverse positive health conceptions such as quality of life, flourishing and well-being. In this light, salutogenesis might be defined simply as processes wherein individuals' and communities' resources are engaged to further individual and collective health and well-being. Of course, this umbrella concept is a particular view of the salutogenesis aficionado; a self-efficacy researcher might be inclined to place salutogenesis under the umbrella in the company of all the other positive health concepts.

Salutogenesis in Companionship: Comparable Concepts and Developments

The salutogenic model originated as a stress and coping model (Antonovsky, 1979). Antonovsky referred to Selye's (1956) and Lazarus and Cohen's (1977) work as inspirational. As does the salutogenic model, Lazarus and Cohen's transactional model of stress assumes an interaction between external stressors and a person who evaluates stressors based on the resources available to cope. In the domain of working life, the well-established job demand-control model (Karasek, 1979; Bakker et al., 2015), the effort-reward imbalance model (Siegrist et al., 1986; Van Vegchel et al., 2005) and the more generic job demands-resources model (Bakker & Demerouti, 2007) share with the salutogenic model the basic idea of a balance between stressors and resources, and that they have been empirically tested in relation to disease outcomes. In a recent development, an organisational health model has emerged from the explicit linking of the job demand-resource model (Bakker & Demerouti, 2007) with salutogenesis (Bauer & Jenny, 2012; Brauchli et al., 2015).

Salutogenesis as an orientation is an idea in close concert with a broad academic movement towards a positive perspective on human life. There are traces of salutogenesis in philosophy, at least since Aristotle reflected on the hedonic and eudaimonic qualities of (positive) health (Ryan & Deci, 2001). Three decades before *Health, Stress and Coping*, the World Health Organization's constitution pronounced that health is more than the absence of disease. Illich (1976) commented on the medicalisation of life. Social epidemiology has a long tradition of considering broad social determinants of health beyond the proximal disease risk factors (Berkman et al., 2014). More recent developments include research on positive psychology and positive organisational behaviour in organisational psychology (Nelson & Cooper, 2007), on happiness in management research (Judge & Kammeyer-Mueller, 2011), on place as a resource in social ecology (Von Lindern, Lymeus & Hartig, this volume), on promoting strengths in educational sciences (Jensen, Dür & Buijs, this volume) and on pre-conditions for substantially rewarding, satisfying and fulfilling lives in the field of positive sociology (Stebbins, 2009; Thin, 2014). In health promotion, the positive paradigm is evident in the recent literature of two kinds: that which describes protective factors against untoward outcomes (e.g. Boehm & Kubzansky, 2012) and that which describes factors promoting well-being (Eriksson & Lindström, 2014).

Conclusions

This chapter—and this handbook—introduces a broad swath of developments that excite the present generation of salutogenesis scholars. Some of these developments are relevant to the salutogenic model, others are firmly focused on the sense of coherence and yet others are more identifiable with salutogenesis as an orientation. The book also takes up parallel developments in positive psychology, occupational and organisational health sciences, social ecology and educational sciences that may make little explicit reference to salutogenesis and are in evident close kinship with salutogenesis. It is one of the main aims of this book to invite an inclusive, bridging dialogue meant to nourish salutogenesis in all its meanings. The book also aims to introduce salutogenesis researchers to scientific kinfolk who contemplate matters highly relevant to salutogenesis, even if they do so in works of literature not searchable with the keyword 'salutogenesis'.

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