CHAPTER 5

The Salutogenic Paradigm

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In the late 1970s, Aaron Antonovsky, who was a medical sociologist, raised a new question in his book *Health, Stress, and Coping* (Antonovsky, 1979). He proposed a new way to look at health and illness, not as a dichotomy but as a continuum—the salutogenic model. Much more than the answers he supplied, the real revolution in Antonovsky's way of thinking was manifested in the questions he posed. However, in posing the question of salutogenesis, Antonovsky actually detached himself from his own past research, as well as from almost everyone else's research at that time, which focused on the need to explain pathology. This led him to feel what he described as a "strong sense of isolation" (Antonovsky, 1987). We trust that in the 21st century, these feelings have been replaced by "a strong sense of belonging" to the growing positive psychology movement (Linley, Joseph, Harrington, & Wood, 2006). Although the salutogenic theory stems from the sociology of health, it has been at the leading edge of a range of academic movements emphasizing human strengths and not just weaknesses, human capacities and not just limits, well-being and not just illness (Mittelmark, 2008). In this chapter, we aim to connect salutogenesis—which literally means the origins of health—with the positive psychology movement.

We believe that the philosophical assumptions and the conceptual background of salutogenesis can deepen our understanding of the roots of the contemporary positive psychology movement. Why was the new term, calling for a new question, the salutogenic paradigm, so revolutionary?

During the first 25 years of research in the sociology of medicine (roughly 1950–1975), many profound contributions were made. This work provided both the theoretical and the empirical basis for the biopsychosocial model. Whatever the problem studied—social class and mental illness, cultural factors and heart disease, or delay in early detection of cancer—the research of psychologists and sociologists added to the understanding of the factors that contribute to the development of disease. Disease was perceived as deviance, as the departure from the known and the normal, as what had to be explained. Medical sociologists were critical of their medical colleagues for neglecting the psychosocial factors relevant to this process. But at the same time, they accepted the pathogenic orientation of the medical paradigm. In other areas of life, some sociologists, as well as a number of psychologists, tended to see conflict, deviance, and heterostasis as immanent. However, when it came to disease, it was assumed, as in the biological sciences, that people remain healthy

unless attacked by some special "bug" or combination of "bugs." This is the essential pathogenic paradigm.

Salutogenesis makes a fundamentally different philosophical assumption about the world. The basic assumption of salutogenesis is that human environments by their very nature are stressor-rich. Such stressors may be microbiological, personal, economic, social, or geopolitical. In any and every event, the human being inhabits a world in which it is impossible to avoid stressors. All human beings are subject to a stressor load. The normal state of the human organism is one of entropy, disorder, and disruption of homeostasis. The basic human condition is stressful. Anyone who has ever raised a child—as Antonovsky used to say to his students—knows, at a gut level, what this is about.

This basic assumption especially struck Antonovsky after he had analyzed life stories of Holocaust survivors (Antonovsky, 1979) and found that more than a few women among them were well-adapted, no matter how adaptation was measured. Despite having lived through the most inconceivably inhuman experience, followed by displaced persons camps, illegal immigration to Palestine, experiencing the Israeli War of Independence in 1948, and other wars and terror events in the long, violent Israeli–Palestinian conflict, as well as suffering long periods of economic austerity, a significant number of women were reasonably healthy and happy, had raised families, worked, had friends, and were involved in community activities. Following these analyses of life stories, Antonovsky's paradigm of questioning began to ask: *Whence the strength?* Only later, however, did his most striking understanding come that "not only the Holocaust or the ongoing poverty can be considered as stressors. It is the human condition itself which is stressful" (Antonovsky, 1979, p. 8).

It appears that this basic philosophical assumption of the salutogenic theory constitutes Antonovsky's most important contribution. Instead of perceiving the human system as one that is sound unless it is attacked by some pathogen, the salutogenic approach views the human system as basically unsound, continuously attacked by disturbing processes and elements that cannot be prevented. Reading the newspaper in the morning, watching TV in the evening, overload at work, raising children—all of these constitute a state of continuing pressure on *each* person. In this basic chaotic condition of the world, Antonovsky claimed, human beings have the ability to find some order. Salutogenesis, then, directs one to think about the mystery of health rather than the causes of illness. In other words, given the world as it is, the meaningful question is not how people get sick, but *how can people stay healthy?*

TWO DIFFERENT PARADIGMS

What have been the consequences of the dominance of the pathogenic paradigm in thinking, research, and intervention? What are the consequences of adopting a salutogenic paradigm? Following Antonovsky, we will consider some of the parameters characterizing these two paradigms.

First, the pathogenic paradigm led us to think about people in an either/or framework—to classify them as either healthy or diseased. Those in the healthy category are normal; their homeostasis is undisturbed. Those in the diseased category are deviant and must be brought back to normal condition. There is, at best, only modest recognition that an intermediate condition between health and disease may exist. Our society, for example, has difficulty in conceptualizing the chronically ill, who nonetheless function in daily life tasks. Moreover, a clear distinction is made between the diseased and the healthy. The sick, who are clearly suffering and in more immediate danger, are granted a more direct claim on society's resources. Moreover,

despite the emergence and the widening of the health promotion discipline in recent years, research budgets for seeking cures are still much greater than those devoted to prevention.

Salutogenesis opens the way for thinking about health and disease along a *continuum* that goes from "health-ease" to "dis-ease." In such an approach, no one is categorized as healthy or diseased. Because we are all somewhere between the imaginary poles of total wellness and total illness, the *whole population* becomes the focus of concern. Even the fully robust, energetic, symptom-free, richly functioning individual has the mark of mortality: He or she wears glasses, has moments of depression, comes down with flu, and may also have as yet nondetectable malignant cells. Even the terminal patient's brain and emotions may be fully functional. The great majority of us are somewhere between the two poles. Priority in service is justly given to those at the sicker end of the continuum. But in our thinking and our research, we should ask: How does a person—wherever he or she is on the continuum—move toward the healthy pole?

Second, thinking pathogenically, we almost inevitably focus on one specific pathogenic entity: heart disease, cancer, schizophrenia, depression. Even those of us with an interest in preventive health behavior are no different: We think in terms of preventing disease or phenomenon X, Y, or Z, studying the genetic, physical, or social risk factors that presumably led to each. The very concept of "disease," as Antonovsky noted three decades ago, suggests that there are *common factors*, both etiologic and symptomatic, to *all* the specific entities that are subsumed under the label. But specialization leads to a disregard of these common factors. In those days, theories were inflexible: Type A behavior patterns were related to coronary heart disease (Mathews, 1977); learned helplessness was related to depression (Seligman, 1972).

In his suggestion to think salutogenically, searching for the mystery of health, Antonovsky freed us, three decades ago, from the limitation of being concerned with a particular disease. In thinking salutogenically, we communicate with all others who work on health research; we deal with the generalized factors involved in movement along a continuum, not just the factors specific for one disease. Speaking of prevention, we look for common factors to prevent a variety of diseases or phenomena. Thus, education campaigns that are carried out to prevent smoking among adolescents can also be directed to preventing other social diseases: unwanted pregnancies, alcohol drinking and drug abuse, or even suicidal behavior (Antonovsky, 1993).

In parallel fashion, and here we come to Antonovsky's core idea, the pathogenic paradigm has constrained us to investigate the cause (or causes) of a specific disease. Prime attention is given to the specific "bugs" related to disease X. After all, because the organism is perceived as naturally homeostatic, we ask about the factors that disturb homeostasis. We try to understand the sick role, and why people go to the doctor. We devote our energies to the study of pathogens. Antonovsky, on the other hand, claimed that stressors, or "bugs," are omnipresent, that pathogens are endemic in human existence and open-ended in their consequences. Assuming that stressors are ubiquitous, we turn our attention away from specific potential pathogens. Instead, we concern ourselves with the resources that help an individual cope with a wide range of pathogens and stressors, actually coping with life (Antonovsky, 1987).

The question then is no longer what keeps one from getting sicker, but what facilitates one's becoming healthier? No longer do we ask how we can eradicate this or that stressor but rather, how can we learn to live, and live well, with stressors, and possibly even turn their existence to our advantage? The question is not only how some cancer patients or poor people manage to stay healthy, but how *any of us* manage to stay healthy.

Antonovsky was also interested in studying the realm of stress. In this area too, the salutogenic view led him to ask other questions than those of other stress researchers at this time. While focusing in his own work on concentration camp survivors, poor people, and African Americans in the United States, he slowly began to ask not the usual question of risk factors, but about salutary factors: What is it that enables some of the camp survivors or some of the poor people, despite the circumstances, to do well? One can also ask, Who are the elderly who succeed in staying in good health? Who are the abused children who, despite their difficult situation, do well? Assuming that risk elements surround us throughout our lives and that they are usually unavoidable, the salutogenic question is then, How is it that, despite this continual state of risk and threat around us, people are not usually in a state of illness and pathology? Salutogenesis proposes changing the question about risk factors to the question of the extent to which we know how to cope with the difficult world around us. Antonovsky considered the salutogenic orientation to be an important innovation and a necessary reorientation of stress resources (Geyer, 1997).

As mentioned earlier, by posing fundamentally new questions Antonovsky parted from his own past research and from that of his colleagues. He wrote and spoke about his sense of isolation, but it was not long-lasting. Evidently, salutogenesis was a concept whose time had come. It offered a fresh, rich, and exciting way of looking at matters that concern all those working in the health, psychology, and well-being fields. In the mid-1980s, it became clear that a radically different mode of thinking was being developed. Instead of asking about pathogens and failures in coping that led to disease, some social scientists (Bandura, 1977, 1997; Kobasa, 1982; Seligman, 1972) began to focus on explanations of successful management of stressors and maintenance of health. Since then, the positive psychology movement has expanded to become a central and important pillar in psychology research (Linley et al., 2006).

By adopting a salutogenic orientation, psychologists, therapists, and physicians have made a substantial difference in their work (Sagy, 2011). Salutogenic questions lead our study—as well as its application—to helping children, families, and communities, wherever they are on the ease/dis-ease continuum, to move toward the healthy end of the ease/dis-ease continuum.

THE SENSE OF COHERENCE CONCEPT

Antonovsky always used to tell his students (the first author was a doctoral student of Antonovsky's) that in all fields of scientific endeavor, the question is always more important than any given answer. However, he himself not only challenged us with a new question, he also had his particular answer to the question. He was convinced that "sense of coherence" is a major determinant of maintaining one's position on the health-ease/dis-ease continuum and of movement toward the healthy end. Research data collected in the past three decades from all over the world seem to confirm this belief (Eriksson & Lindström, 2006).

Once you accept the salutogenic question, you can deal with it on varying levels of generality. Actually, considerable attention in the literature of the 1970s and 1980s had been given to a wide variety of coping variables. They have largely been conceptualized as buffers, mitigating the effect of stressors, mediating or moderating the damaging effects on health (Braun-Lewensohn & Sagy, 2011b). The list is long, ranging from money to knowledge, belief in God to certain coping styles. Social support, networks, social ties, and their relevance to health have become a broad and growing field of research (Gow & Celinski, 2011).

Antonovsky (1987), however, claimed that what characterized most of these studies was their failure to translate the variables into a higher order of abstraction that could provide a theoretical explanation of what these various coping variables have in common, leading the organism to cope successfully and to reinforce health. Thinking in these terms led Antonovsky to the sense of coherence (SOC) construct, which first appeared in *Health, Stress, and Coping* (Antonovsky, 1979). The formulation was based on the assumption that by late childhood or early adulthood (12–30), individuals develop a generalized way of looking at the world, a way of perceiving the stimuli that bombard us.

The cognitive aspect of the SOC construct is the *comprehensibility* component: the extent to which the stimuli deriving from one's internal and external environments are structured, predictable, and explicable. In other words, the world is perceived as ordered and the problems facing us are clear.

The instrumental aspect of the concept is formulated as *manageability*: the extent to which one not only understands the problem, but believes that the requisite resources to cope with the problem successfully are at one's disposal. "At one's disposal" may refer to resources under one's own control, similar to Rotter's (1966) concept, but it may also refer to resources controlled by legitimate others—friends, God, doctors, family—upon whom one can count. No implication exists that untoward things do not happen in life. They do; but when you are high on manageability, you have the sense that, aided by your own resources or by those legitimate others, you will be able to cope and not grieve endlessly.

The *meaningfulness* component of the SOC is, in a sense, the emotional counterpart of comprehensibility. When one says that something "makes sense," in cognitive terms one means that "it is logical"; but in emotional terms, one means that one cares about the problems. To be high on meaningfulness means that one feels that life makes sense emotionally and that at least some of the problems and demands posed by living are worth investing energy in and are worthy of coping, commitment, and engagement.

Much as salutogenesis is a very broad construct, seeking to understand health rather than any given diagnostic category of disease, the SOC is broader than the coping resources that have been studied. First, it is not a coping style or a substantive resource. The crucial idea is that, because people confront such a wide variety of "bugs," no specific style or resource is ever appropriate all the time. The person with a strong SOC, believing that she or he understands the problem and sees it as a challenge, will select what is believed to be the most appropriate tool for the task at hand.

Second, the SOC distills the core of specific coping or resistance resources (money, social support, mastery, a confidant, and so on) and expresses what they have in common: They enhance one's sense of comprehensibility, manageability, and meaningfulness. So replying to the salutogenic question, Antonovsky's theoretical and empirical answer was that the strength of the sense of coherence is an important, if not the decisive, factor in shaping order out of chaos.

SENSE OF COHERENCE AND HEALTH

Wherever one is located on the health-ease/dis-ease continuum, the theory suggests that the stronger one's SOC, the more likely it is to maintain that location or improve it. But how does the SOC work? How does the SOC contribute to health?

Antonovsky suggested several ways. In this limited framework, we will mention only three of them. First, the stronger the SOC, the more one can *avoid* threat or

danger. A person with a strong SOC is more likely to engage in activities that are health-promoting and avoid those that are health-endangering. Believing that life is ordered and meaningful and that you have the resources to manage provides a sound basis for such behaviors. It is worth investing in efforts to stop smoking, to exercise, and to maintain good nutrition because you believe that these efforts will pay off. You are less tempted by the "it can't happen to me" mode of thought. On the other hand, a person with a weak SOC has neither the motivational nor the cognitive basis for the active coping required by the avoidance of threat.

Second, the stronger the SOC, the more likely it is that, confronted by stimuli that cannot be avoided, one will appraise them (Lazarus & Folkman, 1984) not as threats or dangers that paralyze and lead to negative self-fulfilling prophecies, but instead, one will assess them as opportunities that offer meaningful rewards, as challenges worthy of investment of energy, and as situations that can be managed well. The recent widower who has had a happy marriage will, together with the pain and sadness, be able to go on (Parkes, 1971) and restructure his life. In other words, the person with a strong SOC, confronted with a potentially noxious situation, will be more able to define and redefine the situation as one not necessarily noxious.

There is a third way in which SOC leads to health. Whatever the possibility of avoiding threat, or of redefining situations as nonnoxious, life inevitably confronts us with noxious stimuli, with threat, with stressors. How does a strong SOC function positively in promoting health and coping with stress? Antonovsky (1987) considered this question as the heart of the matter. The crucial point is that resistance resources, defined as agencies that facilitate coping with stressors, are potentials. They must be transformed kinetically before they can function to combat and overcome pathogens. The antibiotic is of no use unless it is taken appropriately. The friend is of no use unless there is communication. Money is of no use until it is spent. Surely people differ in the potential resources available to them. But beyond this, they differ significantly in the readiness and willingness to exploit the resources that they do have at their potential disposal. It is this that distinguishes between people with a stronger and a weaker SOC. The former will search very hard for those coping resources that are potentially available; the latter are more likely to give up and say "Neither God, nor I myself, nor anyone else can help me."

In his lectures, Antonovsky used to repeat the example of the young person whose involvement in a traffic accident led to his leg amputation. With a strong SOC, he is much more likely to adopt a self-perception (and seek social reinforcement of the self-perception) as a multifaceted person, one of whose facets is a handicap—more serious than wearing glasses or needing a hearing aid, but less serious than some other handicaps. The person with a weak SOC is more likely to accept the definition, by self and others, of a one-legged person. It seems reasonable to make differential health predictions for the two.

Salutogenically oriented clinicians can indicate the health consequences of interventions such as self-help groups, active participation in transforming environmental conditions, or even faith or self-fulfilling prophecy. It certainly seems reasonable to hypothesize that one who sees life as comprehensible, manageable, and meaningful is more likely to optimally exploit potential resistance resources. This approach can also help us to theoretically explain why some prevention programs or health promotion plans tend to work well for some people but not as well for others (Sagy, 2011).

The following are short research reviews relating to several issues in the salutogenesis paradigm. We have chosen these issues with consideration given to their importance in the developing area of salutogenic research.

How Is SOC Measured?

SOC can be measured by questionnaires and by using in-depth interviews and qualitative analyses (Griffiths, Ryan, & Foster, 2011). Originally SOC was measured by 29 items reflecting a person's ability to view life as comprehensible, manageable, and meaningful (Orientation to Life Questionnaire; Antonovsky, 1987). A shorter form of 13 items (abbreviated to SOC-13) was later developed. Items on both the 29- and 13-item versions are rated on a 7-point Likert scale. Total scores are obtained by summing items such that scores have a possible range from 13–91 points (SOC-13) or 29–203 points (SOC-29). A detailed description of the questionnaire is found in Antonovsky (1987). Eleven items measure the comprehensibility dimension (five items in SOC-13); for example, "Has it happened in the past that you were surprised by the behavior of people whom you thought you knew well?" and "Do you ever have the feeling that you are in an unfamiliar situation and don't know what to do?"

The manageability dimension is measured by 10 items (4 items in SOC-13); for example, "Do you think that there will always be people whom you'll be able to count on in the future?" and "Do you have the feeling that you're being treated unfairly?" Eight items measure the meaningfulness component of the SOC (four items in SOC-13); for example, "How often do you have the feeling that there's little meaning in the things you do in your daily life?" and "How often do you have the feeling that life is full of interest or completely routine?"

The SOC questionnaire has been used in at least 49 languages in 45 countries all over the world, on all continents (not only in Western countries), in varying cultures, and on different samples such as healthy populations, groups of patients and disabled people, families and organizations (Eriksson, in press). It has also been adapted for children and adolescents. A separate questionnaire for use among children was developed (Margalit & Efrati, 1996). The Children's Sense of Coherence Scale (CSOC) consists of 16 primary items and 3 filler items (higher scores reflect more coherence) that describe children's sense of confidence in their world, as expressed in their sense of comprehensibility (understanding their environment, e.g., "I feel that I don't understand what to do in class"); sense of manageability (feelings of control and confidence that when help is needed, it will be available, e.g., "When I want something I'm sure I'll get it"); and meaningfulness (motivation and interest in investing efforts in different tasks, e.g., "I'm interested in lots of things"). The reliability of this scale has proven to be good in several studies (Margalit, 1998).

The adolescent sense of coherence scale has been adjusted to suit the adolescent stage of life. Several items were eliminated from the original 29-item scale and others were rephrased to make sure adolescents understand the idea behind the items (Antonovsky & Sagy, 1986). Since the original use of the updated scale, many studies have used this version and reliability has proved to be high (Sagy & Braun-Lewensohn, 2009).

There are several versions for the Family Sense of Coherence Scale (FSOC) to measure sense of coherence in families. One version consists of 26 items (Antonovsky & Sourani, 1988), whereas another has 12 items (Sagy & Dotan, 2001). The FSOC has been translated into Hebrew (Sagy, 1998), Chinese (Ngai & Ngu, 2012), Turkish (Cecen, 2007), and Swedish (Mosley-Hänninen, 2009) and has been used to measure family coping in a variety of samples.

Much research has been conducted on families to examine different aspects of adaptation and coping with stress by using one of the original questionnaires, SOC-29 or SOC-13 (Greeff, Vansteenwegen, & Demot, 2006). Recently, collective measures of SOC have been developed with the community as the research unit (Mana, Sagy, Srour, & Madjalli, 2013).

HOW DOES THE SENSE OF COHERENCE DEVELOP THROUGH LIFE?

Work in the past 30 years has mainly focused on SOC as an "independent variable" and health or well-being as the "dependent" variable. The question of the sources of SOC increasingly interested Antonovsky in his later years. His initial efforts in this direction are found in two papers (Antonovsky, 1991, 1993) and in three studies in which he was involved (Sagy & Antonovsky, 1996, 1999a, 1999b, 2000).

In his two articles, Antonovsky (1991, 1993) attempted, within a systems theory framework, to analyze how social structures shape the strength of the SOC. He claimed that to disregard the power of history—the generational experiences of the macropolitical events of war, depression, population shifts, and revolutions—is to disregard the context within which the strength of the SOC of each of us is molded. There is no doubt that early socialization experiences in the family are crucial. But these experiences are shaped by the broader context (Kardiner, Linton, Du Bois, & West, 1945). To write of childhood experiences without locating these in the class structure, without reference to parental occupation or to race, limits our understanding. Antonovsky (who was an enthusiastic sociologist) assumed that first and foremost, a social structure that provides a set of basic, consistent, and clear principles will in all likelihood foster individuals with strong SOC.

However, there are many roads to a strong SOC. In several joint studies (e.g., Sagy & Antonovsky, 2000), we pinpointed some of these pathways. The main life experiences during childhood and adolescence that were found relevant to developing a strong SOC were consistency, emotional load balance, and emotional relationship with a "significant other."

Beyond these life experiences, during the last decade, researchers have examined the role of several sociodemographic factors in enhancing or weakening SOC among adolescents and adults. Gender was found to be the most consistent sociodemographic factor, with men exhibiting higher SOC compared to women (Apers et al., 2013). Socioeconomic status was also found to be an important factor in building strong SOC. Thus, higher levels of parents' education were found to be predictors of strong SOC (Geckova, Tavel, Van Dijk, Abel, & Reijneveld, 2010). Family and community characteristics were examined as well in this context. Open family communication (Garcia-Moya, Rivera, Moreno, Lindström, & Jiménez-Iglesias, 2012), focused parenting, and parents' knowledge regarding their children's needs were found to be positive contributors to strong SOC (Garcia-Moya et al., 2012), as were neighborhood or community cohesion (Marsh, Clinkinbeard, Thomas, & Evans, 2007; Peled, Sagy, & Braun-Lewensohn, 2013).

Another important question relates to the stability of SOC through the life span. This was thoroughly discussed by Antonovsky (1987), who portrayed a scenario of human development in which the SOC is developed until 30 years of age, is stable until retirement, and thereafter can decrease. This assumption is not supported by empirical studies to date. Contrary to what Antonovsky assumed, SOC was found to improve with age during the whole life cycle (Eriksson & Lindström, 2011). In a random Swedish sample of about 43,000 respondents aged 18 to 85, Nilsson, Leppert, Simonsson, and Starrin (2010) showed a relationship between SOC and age, with stronger SOC in the older age groups. Other studies confirm this picture of SOC as a life orientation that can be modified by life experiences throughout the life cycle (Bental-Israeli & Sagy, 2010). The situation seems to be more complicated than Antonovsky's original assumption, and SOC can be a resource promoting resilience and health that develops and is enhanced during life.

Sense of Coherence in Childhood and Adolescence

In studying SOC, an area of special interest is the period of childhood and adolescence. Adolescence is a particularly important stage in the development of cognitive skills, such as SOC, because during this time advanced cognitive abilities are mastered. The advanced forms of reflection, such as the ability to consider things in hypothetical and abstract terms and the ability to monitor one's own cognitive activity during the process of thinking, enable adolescents to see an issue from the perspective of other persons, to plan ahead, to anticipate the future consequences of an action, and to offer alternative explanations of events. Cognitive mastery is therefore an important contribution to young people's ability to manage or regulate their feelings and to control their emotions and/or to avoid being overwhelmed by them (Garnefski, Kraaij, & Spinhoven, 2001).

Is SOC a stable construct during childhood and adolescence? The stability question has accompanied this construct since researchers first began to study it. Due to the developmental nature of childhood and adolescence, SOC can still be strengthened during these stages of life (Antonovsky & Sagy, 1986).

Does SOC predict or explain diverse mental health and health outcomes during childhood and adolescence? The main results of studies throughout the world reveal that, as among adults, stronger SOC is related to better perceived health in children (Braun-Lewensohn & Sagy, 2011b). Moreover, results of the various studies show that children and adolescents with higher SOC report healthier lifestyles, quality of life, and well-being (Neuner et al., 2011). The healthy lifestyle is related, on the one hand, to physical activity (Bronikowski & Bronikowska, 2009) and eating habits (Myrin & Lagerstrom, 2006) and, on the other, to smoking habits and alcohol use (Garcia-Moya, Jiménez-Iglesias, & Moreno, 2013). Psychosocial behaviors as well as school-related behaviors and achievements have also been examined. Stronger SOC has been found as a predictor of good grades and higher motivation, success in schoolwork, and social competence (Mattila et al., 2011), as well as fewer stress-related school experiences (Lackaye & Margalit, 2006).

In contrast to the basic idea of the salutogenic paradigm, SOC was also examined in relation to groups with specific health problems (e.g., Luyckx, Missotten, Goossens, & Moons, 2012). Some of the results are surprising. Adolescents with heart problems were found, for example, to have higher SOC compared to healthy adolescents. These results could be explained by the fact that youngsters with such chronic diseases have learned to cope with their problems. Those who succeed in this process increased their manageability and even their perception of meaningfulness. Moreover, it seems that a supportive home environment experienced by these adolescents emphasized specific life events as being more comprehensible, manageable, and meaningful, and through these experiences they enhanced their orientation of SOC (Luyckx et al., 2012). However, in another study of adolescents with epilepsy (Gauffin, Landtblom, & Raty, 2010), SOC was found to be weakened in the long run, and those with no seizures had higher SOC than those who suffered seizures. This finding could reflect the experience of losing control during seizures and difficulty in assessing when to expect the next seizure, which might decrease comprehensibility as well as manageability and meaningfulness.

In the area of stress and resilience, stress-related outcomes such as anxiety, anger, depression, psychological distress, and other emotional problems were examined mainly in the context of war, terror, and political violence (Braun-Lewensohn & Sagy, 2010) or with regard to extreme life experiences such as child abuse (Gustafsson,

Nelson, & Gustafsson, 2010) or juvenile delinquency (Koposov, Ruchkin, & Eisemann, 2003). However, SOC has been constantly found as a major protecting factor in moderating stress reactions (Sagy, in press). During adolescence, chronic stress situations were found to have the potential of deteriorating SOC (Braun-Lewensohn & Sagy, 2010). In other acute situations, SOC might be weakened for a certain period of time and once the acuteness is over, it could recover (Braun-Lewensohn, Sagy, Sabato, & Galili, 2013).

In sum, a review of studies in the past decade across countries and in a variety of age groups from early childhood to adulthood shows that personal SOC is a meaningful resource for coping with a variety of stressful situations and is a potential protective factor for children and adolescents. It appears that during childhood and adolescence, SOC might contribute to moderating and mediating stress experiences and may also play a protective role even at a young age, similar to that of the mature adult SOC.

WHAT IS THE COLLECTIVE SENSE OF COHERENCE?

The question of transferring the individual concept of SOC into a collective measure is another meaningful issue that Antonovsky mentioned in his 1987 book:

> A Stressor—the threat of unemployment, retirement of a family member, the breakdown of a political system, the birth of a child who has serious disability—poses a threat (or challenge) to a definable collective. On the other hand, the stressor can only be coped with successfully by a collective. This brings us to the question of whether it makes any sense to speak of a collective as perceiving the world as coherent. (p. 171)

At the philosophical level, the question is, "Does a collective—a family, a work group, a kibbutz, a social class, a nation—have a mind which perceives?" (Sagy & Antonovsky, 1992, p. 983). Can a collective have a dispositional orientation, a way of seeing the world as comprehensible, manageable, and meaningful? Can the collective SOC be more than the sum of the members' SOC? Is it possible that one member's SOC could strengthen or weaken the SOC of the others?

Although we would expect a positive correlation between a strong group SOC and the SOC of its individual members, there will not necessarily be a perfect correlation. Individuals may feel that for them personally, the world is not coherent, although they are confident that it is for the collective. We can see this in almost every beginning first-year university class. On the other hand, individuals may feel that for them the world is coherent, although they feel anxious that it is not so for the collective. We can see such examples in surveys among Israelis regarding their (high) personal and their (low) national well-being (Sagy, in press).

The question of collective SOC has hardly been addressed until recently, perhaps because it is fraught with theoretical and methodological difficulties. In the dissertation of the first author under the supervision of Antonovsky, she attempted to wrestle with the problem of family SOC (Sagy & Antonovsky, 1992), asking about the difference it makes to the individual's health whether he or she belongs to a group (or groups) with a weak or strong SOC. Does knowing this enable any better prediction than simply knowing the individual's SOC? Actually, in that study of family coherence and retirement, she asked the comparative question "Do characteristics of the

individual or those of the larger social system, in which the stress process occurs, contribute more to the understanding of coping with stressors and stress consequences?" The results (Sagy & Antonovsky, 1992) were unequivocal. For the sample as a whole, both individual and family orientations seemed to be of equal power in explaining adaptation to retirement. An interesting pattern, however, emerged among incongruent families, when one of the spouses had a high and the other a low SOC score. In these families, it was the score of the high-SOC spouse that was the decisive factor in predicting the retiree's adaptation. In other words, the high family score was clearly the most powerful predictor of the retiree's adaptation. These results suggest that knowing family orientation can provide a better understanding of adaptation than knowing only the orientation of the individual.

Further research on collective SOC has mostly been conducted by the first author of this chapter and her colleagues. Despite the unequivocal data (Braun-Lewensohn, Sagy, & Roth, 2011; Mana et al., 2013; Sagy, in press), we can still suggest that it is the comprehensibility, the manageability, and the meaningfulness of the network, the group, the collective, and the community that must be a central theme in the salutogenesis paradigm of research and implementation.

When Is SOC Not Significant in Understanding Health and Well-Being?

Having cited these very general conclusions from almost three decades of research, we would like to present two cases in which the SOC does not "work," or "works" differently, meaning that it does not contribute to moderating stress reactions or to promoting health. We trust that these two unique cases enable us to better and more deeply understand salutogenesis and the concept of SOC.

One case relates to the type of stressful situation: *When is SOC not significant in reducing emotional stress?* The other case refers to a special cultural group in which it was found that SOC does not moderate emotional distress: *For whom is the SOC irrelevant in explaining emotional reactions?*

We will start with the "when" case: Only a few models or theories on the resilience effects of stress focus on the issue of differential stress situations and their possible relations to stress reactions (Sagy, 2002). It is important to point out that the comparative question of when coping resources do or do not moderate psychological difficulties has not been systematically studied. A recent study carried out by two of the authors (Sagy & Braun-Lewensohn, 2009) examined coping resources of adolescents during two different stress experiences of political violence. The cross-situational study compared stress reactions of Israeli (Jewish and Arab) adolescents under two environmental circumstances: chronic and acute states of stress. The acute situations in the political conflict are mostly related to wars or terror attacks. They can be characterized by their intensity and unpredictability. The chronic situation is more habitual in nature. In that study, the acute situation was investigated in northern Israel, an area that was then suffering from intensive missile fire. Almost 4,000 rockets fell in the area during 1 month, approximately 200 missiles per day. There were about 900 injuries caused by the missiles in northern communities and 52 civilians were killed. The long-term chronic stress state was examined in southern Israel (the city of Sderot and kibbutz communities in the Negev), an area that, over 8 years, was exposed to frequent missile attacks, usually one or two strikes at a time, sometimes several times a day. We asked, "In which state are the coping resources more significant in reducing emotional responses?"

The significant finding of this study resides in the different magnitude of variance explanations at each state: 35% of the variance was accounted for in the chronic state,

but only 16% of variance was explained in the acute stress situation. In the chronic state sample, the main predictor for the two stress reactions was SOC that contributed 15% to the variance. In the acute state sample, the exposure variable was one of the significant factors in explaining the variance (4%) and SOC contributed only 4% to the variance explanation. Overall, the findings confirm crisis theories like Caplan's (1964), which claim that the intensity of reactions in an acute situation is mainly influenced by the overwhelming nature of the situation itself. However, our findings also confirm salutogenesis, meaning that in the chronic situation, which is similar to what Antonovsky called *regular life*, the SOC is significant in reducing emotional reactions of anxiety and distress (Antonovsky, 1987).

These results support the value of developing a model that differentiates between stress situations with the aim of understanding the different patterns of salutary factors explaining the stress reactions. Our findings put greater emphasis on the chronic stressor, which was also found to have more pervasive effects, than on the dramatic, acute war situation.

Some applications for fieldwork with children and families in a conflictual area can be suggested: In an acute situation (war, terror attacks, etc.), it is much more significant to intervene at the situational level in order to minimize the exposure to stress and damage. The intervention should move away from focusing on individuals or families at risk to developing a strategy that encompasses the total population within the given acute stress state (for example, building more shelters, publishing regulatory rules on how to behave when the siren sounds). On the other hand, in chronic situations, personal or family SOC seems to moderate stress responses by increasing the ability to cope with the chronic situation. In these situations, it would be meaningful to provide interventions that strengthen resilience resources of individuals and families.

Our second case relates to the question, *For whom is SOC not significant in explaining health or emotional reactions?* This question is relevant for the wider question of culture and salutogenesis (Eriksson, Sagy, & Lindström, 2012). As a committed sociologist, Antonovsky had a deep belief in the place of culture in stress research. However, in the appendix of his second book, *Unraveling the Mystery of Health* (Antonovsky, 1987), culture is mentioned only twice, especially in connection to cultural limits for developing SOC. How can we understand this "mystery"?

The answer might lie in Antonovsky's (1987) conviction that he had succeeded in developing SOC as a cross-cultural concept. He claimed that it was only the concrete translation of SOC that could vary widely according to cultural codes. What he meant was that, in all cultures and at all stages of coping with a stressor, a person with a strong SOC is at an advantage in preventing tension from being transformed into stress. An orientation toward one's world that sees stimuli as meaningful, comprehensive, and manageable provides the motivational and cognitive basis for behavior that is more likely to resolve the problems posed by stressors than one that sees the world as burdensome, chaotic, and overwhelming.

It is only when seeking to understand *how* SOC works that it varies widely. One's culture defines which resources are appropriate and legitimate in a given situation. Thus, the hallmark of the strong-SOC person is the ability to choose what seems to be the most appropriate strategy from among the variety of potential resources. But this choice is constructed by his or her cultural manners. We always cope with stress within cultural contexts, which defines the canon, the rules. Americans will generally use primary control, whereas the Japanese will generally make use of secondary control. According to cultural rules, your confidant may be my father or your own sister, one's priest or one's rabbi. Within these cultural constraints, however, the strong-SOC

person will be flexible in choosing his or her strategies and in gaining better outcomes from the coping process.

So according to the salutogenic model, culture sets limits, but within these limits, it is the level of SOC that matters. Our studies among Jewish and Arab teenagers living in northern Israel, for example, support this distinction. It was the boy or girl with strong SOC, whether Arab or Jew, who expressed less anxiety or suffered from fewer symptoms. However, the strategies of coping were quite different between Jews and Arabs, as they also were between boys and girls (Braun-Lewensohn, 2013; Braun-Lewensohn & Sagy, 2011). But does SOC matter in all cultural groups? Recent studies show that cultural and ethnic context differences indeed play a role in the process in which coping resources serve as explanatory factors of distress reactions. Among Bedouin adolescents, for example, SOC did not serve as a protecting factor when facing politically violent events (Braun-Lewensohn & Sagy, 2011b), and among Bedouin women in Israel, SOC even played a negative role by increasing depression (Daoud, Braun-Lewensohn, Eriksson, & Sagy, 2013). In sum, although we have some tentative answers, most of the research does not provide unequivocal results. The question of salutogenesis, SOC, and culture is still open and should be addressed in future research.

PRACTICAL IMPLICATIONS

The basic idea of salutogenesis assumes stress and chaos as natural parts of life. In the fieldwork, by adopting a salutogenic orientation, psychologists, therapists, or physicians made a substantial difference in their work (Sagy, 2011). Salutogenic questions lead our study—as well as its application—to helping children, families, and communities, wherever they are on the health-ease/disease continuum, to move toward the healthy end of the continuum.

Salutogenically oriented clinicians can indicate the health consequences of interventions such as self-help groups, active participation in transforming environmental conditions, or even faith or self-fulfilling prophecy. It certainly seems reasonable to hypothesize that one who sees life as comprehensible, manageable, and meaningful is more likely to optimally exploit potential resistance resources. This approach can also help us to theoretically explain why some prevention programs or health promotion plans tend to work well for some people but not as well for others (Sagy, 2011).

The coping resource of SOC, as it appears throughout research around the world, provides significant protection for human beings. It appears that when an individual is facing a stressful event, a major resilience factor in different contexts is the personal sense of coherence. Strengthening this coping resource could enable individuals to better adapt when confronted with stress. Whether at home, at work, at school, or on a community level, it is important that individuals be included as integral parts of societal and familiar processes that could contribute to enhancing their sense of coherence. Comprehensibility could be strengthened with promotion of feelings of security and buildup of safe and respectful environments that can promote social relationships (Krause, 2011). Manageability, the individual belief that one has the resources needed to deal with situations, could be increased when the individual feels that his or her needs are being acknowledged. Therefore, experiencing self-efficacy, balance between overload and underload, acceptance and appreciation of one's individual progress and achievements, as well as recognition of his/her actions can enhance this component. Finally, meaningfulness, which is the motivational and emotional component of SOC, can be increased and promoted when individuals feel that they have real potential to influence decisions (Krause, 2011). Increasing and promoting personal

SOC could be via family or community capacities and the connections among the different ecological arches (Bronfenbrenner, 2009).

CONCLUSION

In this chapter we have tried to describe and explain the essence of the salutogenic conceptual framework developed by Antonovsky and to suggest it as a possible philosophical basis for the contemporary positive psychology movement. The study of positive psychology—somewhat in a similar direction as salutogenesis—encourages the shift in emphasis from a preoccupation with the repair of defect and focus on disease to the building of defense and strength (Seligman, 2002). In this concluding section, we also wish to broaden the core concept of salutogenesis—the SOC construct—to other positive concepts, and to suggest salutogenesis as a possible umbrella paradigm for a variety of resource-oriented constructs (Lindstrom & Eriksson, 2011).

The positive psychology movement has produced several conceptual frameworks: cognitive, emotional, interpersonal, religious, and philosophical models (Lopez & Snyder, 2003). An array of instruments to measure human strengths have also been suggested: Optimism, hope, locus of control, creativity, self-esteem, emotional intelligence, empathy, humor, and gratitude (Lopez & Snyder, 2003) are only a few examples. Further, all these concepts can be applied in different arenas, such as educational contexts (teaching and learning) and psychological and medical practices. Moreover, community researchers and public policy planners suggest transforming positive psychology from an individual level to a societal level as well (Linley & Joseph, 2004). This is very encouraging.

Considering the salutogenic framework, a somewhat similar scenario emerges. Salutogenesis (and its core construct, the SOC) originally developed and was considered at an individual level and with its relation to health results; it is now a framework applicable to different arenas (family, neighborhood, workplaces, organizations). It has recently been discussed in an educational context as contributing to learning processes (Lindström & Eriksson, 2009), as well as in societal and political contexts (Sagy, in press).

As a former student of Antonovsky, and later as his research colleague, the first author has brought extensive knowledge of the philosophical and theoretical roots of salutogenesis to this chapter. We have emphasized the basic idea of salutogenesis that the human condition is mainly chaotic. In the very nature of human existence, stressors are omnipresent. We live in a complex world where our sets of values, formed in childhood in a local context, are challenged by the global world. Social trends point to a major upset of the traditional social structures, such as the rupture of local and intimate networks, changed function and structure of family networks, and challenges in the patterns of working life and in the political arena. The way we communicate with each other has changed because of new information technology, which presents opportunities but also challenges one's personal ability to run a coherent life. There is a risk that life becomes fragmented as our closest environment is characterized by a rapid change. A life constantly online causes a threat to one's mental and spiritual well-being in spite of the increase in material goods. Yet many people, even those with a high stressor load, survive and do well. This is what the mystery of the salutogenic orientation seeks to unravel.

Antonovsky's answer to the salutogenic question was the concept of sense of coherence. We have tried to illustrate how to measure the SOC both on the individual and collective levels. We have written a brief overview of current research, with special

focus on children and adolescents, showing that a strong SOC has an impact on health and well-being. We have also indicated when, where, and for whom SOC is not associated with better well-being.

These basic ideas could perhaps be valuable for the positive psychology movement, for example, by expanding research from the strong focus on strengths as an individual characteristic to a more comprehensive perception of life orientation, as well as discussing strengths not only at the individual but also at the social level (Sagy, in press). Can we learn how to develop strong SOC and be healthier? Here we trust that positive psychology can make a meaningful contribution with its broad research on human strengths and coping resources.

To build a joint future, we must rely on historical and philosophical roots. Despite the differences between the two conceptual frameworks, we do believe that the philosophical roots are shared: The human condition is chaotic, but strengths and abilities can enable us to find some order in the chaos, some joy in the misery.

SUMMARY POINTS

Salutogenesis

- Assumes that stress and changes are a natural part of life.
- Raises the critical question, How do we manage stress and still feel well?
- Puts the focus on strengths and resources, on what works.
- Gives the direction for life, a life orientation.
- Relies on the core concept of sense of coherence (SOC), consisting of three dimensions (comprehensibility, manageability, and meaningfulness).
- Is more than the measuring of SOC; it is a resource-oriented approach similar to the positive psychology movement.

Sense of Coherence

- Can be applied at an individual, group (family), community, and even societal levels.
- Has an impact on health, quality of life, and well-being among children, adolescents, and adults.
- Seems to increase with age during the whole life cycle.
- Can be learned and can be strengthened by interventions.

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