

Maurice B. Mittelmark, Torill Bull, Marguerite Daniel, and Helga Urke

Introduction

This chapter discusses conceptual and concrete differences between generalised and specific resistance resources in the salutogenic model of health. This is important to health promotion research and practice, because the means by which these different types of resources are strengthened are dissimilar. It is important to distinguish between the two types of resistance resources, to ensure that health promotion pays balanced attention to both types. As this chapter explains, the ways in which generalized resistance resources and specific resistance resources are developed may differ, with implications for health promotion practice.

To summarise the main idea of this chapter, generalised resistance resources arise from the cultural, social and environmental conditions of living and early childhood rearing and socialisation experiences, in addition to idiosyncratic factors and chance (Lamprecht & Sack, 2003; Lindström & Eriksson, 2005). Specific resistance resources (SRR) on the other hand are optimised by societal action in which health promotion has a contributing role, for example the provision of supportive social and physical environments.

The Salutogenic Model of Health Logic

Antonovsky (1987) called for research to develop scientific knowledge about how to strengthen the sense of coherence. This could be done by building on the resistance resources that are the properties of individuals, of groups, and even of situations. Generalized resistance resources (GRR) facilitate coping with stressors and strengthen the sense of coherence.

M.B. Mittelmark (✉) • T. Bull • M. Daniel • H. Urke
Department of Health Promotion and Development, Faculty
of Psychology, University of Bergen, Bergen, Norway
e-mail: maurice.mittelmark@uib.no; torill.bull@uib.no; marguerite.daniel@uib.no; helga.urke@uib.no

Confronting the question of how a strong sense of coherence translates into better health, Antonovsky proposed that “a strong SoC [...] allows one to ‘reach out’, in any given situation, and apply the resources appropriate to that stressor” (Antonovsky, 1996, p. 15).

The highly simplified salutogenic model of health logic is:

$$\text{RR} \rightarrow \uparrow \text{SOC} \rightarrow \uparrow \text{use of RR} \rightarrow \uparrow \text{HEALTH}$$

Generalized resistance resources and specific resistance resources will be formally defined later, but for now generalized resistance resources are resources that have wide-ranging utility (one’s social network for example), while specific resistance resources have situation-specific utility (e.g. an emergency phone number to reach the police). Considering generalized resistance resources and specific resistance resources, Antonovsky felt it was:

“...imperative to focus on developing a fuller understanding of those generalized resistance resources that can be applied to meet all demands” (Antonovsky, 1972, p. 541), while

“... [SRRs] are often useful in particular situations of tension. A certain drug, telephone lifelines of suicide prevention agencies... can be of great help in coping with particular stressors. But these are all too often matters of chance or luck, as well as being helpful only in particular situations. ...[and] ... it is the GRR that determines the extent to which specific resistance resources are available to us” (Antonovsky, 1979, p. 98–99).

This goes a great way to explaining why Antonovsky’s attention was mostly on the left side of the revised salutogenic model of health logic as shown below, which highlights the differentiation between generalized and specific resistance resources:

$$\text{GRR} \rightarrow \uparrow \text{SOC} \rightarrow \uparrow \text{use of GRR} \ \& \ \uparrow \text{use of SRR} \\ \rightarrow \uparrow \text{HEALTH}$$

A more realistic depiction would be a systems-like diagram with double-headed arrows connecting everything to

everything. Yet, the simplification is useful for the present purpose, which is to elucidate the GRR/SRR distinction.

Specific resistance resources need not always be ‘matters of chance or luck’. Indeed, it is an essential aspect of the practice of health promotion to replace chance and luck with fair and dependable availability of specific resistance resources that support health. One of the highest priorities of health promotion is the provision of supportive environments for health (WHO, 2009). Supportive environments include both generalized resistance resources and specific resistance resources, but as suggested in the salutogenic model of health logic above, they have distinctions.

Most of the space in this paper is devoted to a discussion of the nature of specific resistance resources and health promotion’s role in their nurturance. However, some space is given to a brief overview of the nature of generalized resistance resources, so that the distinctions, similarities and interrelationships between generalized resistance resources and specific resistance resources can be considered. The reader interested in a full exposition of generalized resistance resources is referred to the preceding chapter in this Handbook, and to Chapter Four in Antonovsky’s *Health, Stress and Coping* (1979).

Antonovsky (1979, P. 99) defined a generalized resistance resource as “any characteristic of the person, the group, or the environment that can facilitate effective tension management”. He was quite clear that generalized resistance resources and specific resistance resources are not exchangeable concepts: “...it is the GRR that determines the extent to which specific resistance resources are available to us... being literate or being rich... opens the way to exploitation of many specific resistance resources...” (Antonovsky, 1979, pp. 99–100). A perhaps more precise formulation is that when confronted with a particular stressor, a strong sense of coherence enhances one’s ability to recognise and activate the most appropriate specific resistance resources from those that may be available.

Antonovsky (1979, pp. 103–119) discusses generalized resistance resources that operate through physical and biochemical mechanisms (e.g. immune function), that enable the acquisition of specific resistance resources (as money may do), that are intrapersonal (e.g. with ego identity, intelligence, and coping), that are social (interpersonal ties and social embeddedness), and that are cultural (providing guidance as to how stressors should be encountered). Generalized resistance resources play two important roles in coping: they help determine the strength of sense of coherence *and* they enable the use of specific resistance resources.

Specific Resistance Resources

The salutogenic model of health logic as diagrammed and discussed above is derived from Antonovsky’s separate expositions on generalized resistance resources and sense of coherence and on sense of coherence and specific resistance resources (Antonovsky, 1979). Yet, neither Antonovsky nor the few others who have written about specific resistance resources have shown much interest in the GRR/SRR differentiation. For example, in Antonovsky’s (1979) extremely detailed depiction of the salutogenic model of health (ibid, pp. 184–185), a strong sense of coherence is shown as mobilising generalized resistance resources and specific resistance resources with no differentiation of the two. Both types of resistance resources are posited to have roles in the avoidance of stressors, in the definition of stimuli and non-stressors, and in overcoming stressors. Antonovsky hardly mentioned specific resistance resources in his *Unraveling the Mystery of Health*, but when he did, he did not make a point of the distinction between generalized resistance resources and specific resistance resources:

“What the person with the strong SoC does is ... [choose] from the repertoire of generalized and specific resistance resources at his or her disposal...” (Antonovsky, 1987, p. 138).

Others seem to agree that the GRR/SRR distinction is not particularly important. Poppius (2007) writes about choosing “from the repertoire of generalised and specific resistance resources [...] in what seems to be the most appropriate combination”. Nene (2006) notes that the sense of coherence is influenced by generalized resistance resources and by specific resistance resources and makes no differentiation between the two. Sullivan (2006) does make a differentiation, stating that nursing is a generalized resistance resource, while the nurse providing help with a particular problem is a specific resistance resource. Yet, Sullivan does not develop that distinction in terms of the role of sense of coherence. Haldeman and Peters (1988) intended to measure specific resistance resources in a study aimed to identify the combination of specific resistance resources and tension that would best predict stress. They operationalise specific resistance resources as satisfaction with family life and with family finances, frequency of interactions with friends and relatives and number of community resources used. These measures are distant from the concept of specific resistance resources as distinguished from generalized resistance resources, even if the number of community resources is measured. Specific resistance resources are particular resources used in encounters with particular stressors, as in Antonovsky’s example of the use of a suicide hotline by a suicidal person. Reininghaus et al. (2007) noted the distinction between generalized

resistance resources and specific resistance resources, in a study of stress connected to assault on psychiatric nurses, then rejected the distinction by creating a measure of ‘stress resistance resources’ composed of self-esteem (a generalized resistance resource), self-confidence (a generalized resistance resource), received clinical supervision (specific resistance resource) and staff support services (specific resistance resource). Taylor (2004) differentiated generalized resistance resources and specific resistance resources in her literature review of salutogenesis as a framework for child protection, but characterised both, without differentiation, as helping people to structure life experiences to reinforce the sense of coherence.

These citations are not ‘cherry-picked’, highly selected counter-examples from a large literature in which generalized resistance resources and specific resistance resources are discussed: they are all the instances in which specific resistance resources received explicit attention, in a reasonably thorough literature search.

Why do specific resistance resources receive so little attention? One answer is that following Antonovsky’s lead, there is all-consuming attention to the sense of coherence part of the salutogenic model of health logic—particularly its measurement (Eriksson & Lindström, 2005) and its relationship to health and wellbeing (Eriksson & Lindström, 2006, 2007). Even if Antonovsky wished health promotion to focus on the sense of coherence as the dependent variable, most researchers have focussed on it as the independent variable. While this could be assumed to drive interest in specific resistance resources as mediators in the sense of coherence/health relationship, such interest is not manifest. To the contrary, there has been little interest in the question of what *mediates* the connection between the sense of coherence and health, despite Antonovsky’s postulation that a strong sense of coherence allows one, in any given situation, to apply the appropriate generalized resistance resources and/or specific resistance resources (Antonovsky, 1979).

One additional, critical point needs to be made in this attempt to clarify why specific resistance resources have received little attention in salutogenic research, and why this should be rectified. As already noted, Antonovsky viewed specific resistance resources as all too often matters of chance or luck. In the mid-1990s, he observed that health promotion had not:

“...confronted the question of the creation of the appropriate social conditions which underlie or facilitate health-promotive behaviors, for example adequate day care facilities and access to health care, not to speak of incomes adequate for decent nutrition and housing.” (Antonovsky, 1996, p. 12).

Put in contemporary terms, Antonovsky referred to social determinants of health (e.g. the generalized resistance resource ‘income’) and to supportive social environments (e.g. the specific resistance resource ‘day care’). His

criticism was perhaps valid for the form of health promotion that dominated in Europe and the USA in the 1970s and 1980s, concerned mostly with individuals’ responsibility for their own health and calling for individuals to abandon their risk behaviour to prevent chronic diseases.

However, health promotion has evolved. The 1986 Ottawa Charter for Health Promotion acknowledged individuals’ responsibility, but emphasised the importance of social determinants of health and the creation of supportive environments (Eriksson & Lindström, 2008; Kickbusch, 2003). In recent decades, health promotion moved from an almost myopic concern with individuals’ health-related lifestyles to balanced concern with processes for empowering individuals and communities to control their own health. This is accomplished, in good part, by creating environments supportive of health, or ‘appropriate social conditions’ in Antonovsky’s words. Health promotion’s concern with appropriate social conditions has taken two main forms. One is an overarching emphasis on reducing social inequities in health by a fairer distribution of social resources (Marmot, Friel, Bell, Houweling, & Taylor, 2008). The other is the health promotion ‘settings’ approach, in which schools, workplaces and whole communities are considered as locales for health promotion, expanding from the traditional locus of health care in doctors’ offices, health clinics and hospitals (Dooris et al., 2007; Poland, Krupa, & McCall, 2009). Does health promotion’s settings approach mean that it has engaged the specific resistance resource concept, or the generalized resistance resource concept? A nuanced answer depends in part on a precise definition of specific resistance resources.

Definition of Specific Resistance Resources

A useful definition of specific resistance resources must distinguish them from generalized resistance resources. Bengt Lindström is famous for his illustrated lectures on salutogenesis in which a cartoon figure travels across the chalkboard, in the river of life, encountering stressors, trials and tribulations, equipped with a knapsack stuffed with generalized resistance resources acquired during a lifetime (Fig. 8.1). The main point is that the generalized resistance resources are already available, to be engaged as needed as one encounters various situations creating tension. In concert with this metaphor, we conceptualise specific resistance resources as available in the river, to be picked up and used as needed in specific encounters with stressors, and not necessarily to be placed in the knapsack afterwards. The relationship between generalized resistance resources and specific resistance resources is that via the sense of coherence, generalized resistance resources enable one to

Fig. 8.1 Generalized resistance resources in the knapsack

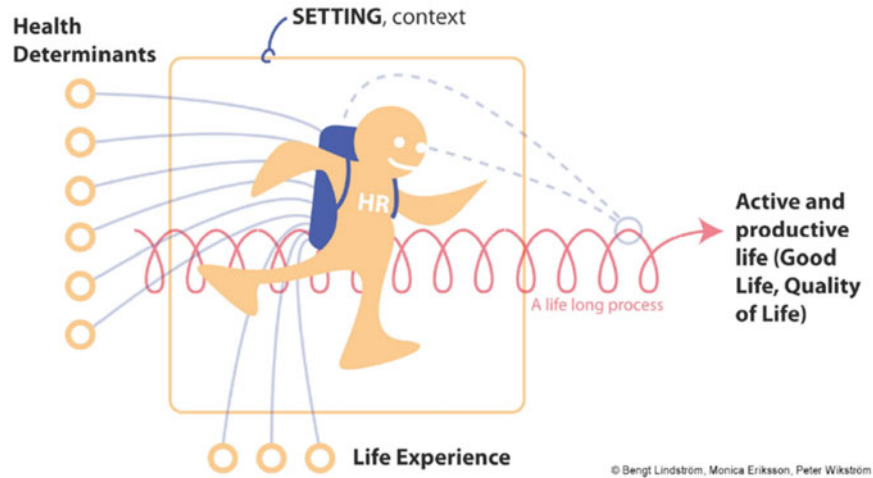
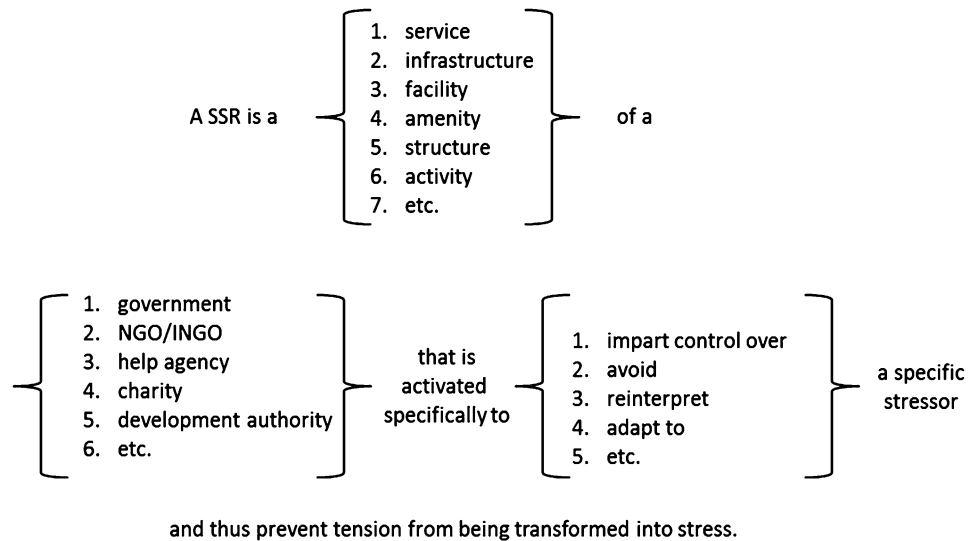


Fig. 8.2 Mapping sentence definition of specific resistance resources



recognise, pick up and use specific resistance resources in ways that keep tension from turning into debilitating stress.

A brief example: Having access to and understanding the empowering potential of the Internet is a generalized resistance resource. The availability of information about your present worrying symptoms on Wikipedia is a specific resistance resource. That you have access to, and proactively search for, read, critically evaluate and use the Wiki's information exemplifies the salutogenic model of health logic:

- (a) GRR → ↑ use of SRR → ↑ HEALTH
- (b) INTERNET → ↑ SPECIFIC WIKI → ↑ HEALTH

This is, of course, oversimplification. For example, while the Internet has undoubtedly contributed to enhanced sense

of coherence for many people, it is but one of many generalized resistance resources having equal or greater influence on the sense of coherence. The point of the diagram is not to depict the salutogenic model of health in detail, but to show how generalized resistance resources and specific resistance resources are substantially different. Of course, health promotion interventions might focus on both; increasing people's unfettered access to the internet and their skill in using it (enhanced a generalized resistance resource). . . and making web sites that address various specific health issues that are of salience when particular nasty symptoms pop up (enhanced specific resistance resources).

A formal definition of specific resistance resources is shown in Fig. 8.2, using Facet Theory's sentence mapping approach to formalisation of definitions (Borg & Shye, 1995;

Canter, 2012). Antonovsky (1979) used the same approach to define key concepts including health on the ease/dis-ease continuum (ibid, p. 65), generalized resistance resource (ibid, p. 103) and the sense of coherence (Antonovsky, 1987, p. 77). The elements in the three arrays of the mapping sentence definition are not meant to be exhaustive, but rather are illustrative.

Specific resistance resources are instrumentalities whose meanings are defined in terms of the particular stressors they are invoked to manage. A generalized resistance resource is a generality and a specific resistance resource is a particularity. Normally, specific resistance resources are not invoked unless tension is perceived to threaten to convert to debilitating stress, which many tensions do not. The salutogenic model of health is concerned with ubiquitous tensions that *do* have the potential to convert to health-threatening levels of stress. Antonovsky (1979, pp. 89–90) listed these:

“...accidents and the survivors; the untoward experiences of others in our social networks; the horrors of history in which we are involved; intrapsychic, unconscious conflicts and anxieties; the fear of aggression, mutilation and destruction; the events of history brought into our living rooms; the changes of the narrower world in which we live, phase-specific psychosocial crises; other normative life crises—role entries and exits; inadequate socialisation, underload and overload; the inherent conflicts in all social relations; and the gap between culturally inculcated goals and socially structured means”.

A useful examination of the differences between generalized resistance resources and specific resistance resources should be undertaken with this understanding of psychosocial stressors in mind. At extremes—surviving a plane crash, taking an exam—stressors are stressors from the start, or tensions that simply remain tensions.

An Example: The Turmoil of Adolescence

The starting point for this example is a poor, tough inner city neighbourhood in which a middle school (junior high school) is situated. Virtually all the adolescents attending the school are stressed all the time, by the demands of maturation, peer relations, teachers’ demands, home and community conditions and so on.

The school aspires to be a health promoting school, and strives to meet these goals:

- Promote the health and well-being of students
- Enhance the learning outcomes of students
- Uphold social justice and equity concepts
- Provide a safe and supportive environment
- Involve student participation and empowerment
- Link health and education issues and systems

- Address the health and well-being issues of all school staff
- Collaborate with parents and the local community
- Integrate health into the school’s on-going activities, curriculum and assessment standards.
- Set realistic goals built on accurate data and sound scientific evidence.
- Seek continuous improvement through on-going monitoring and evaluation

The school is obviously aiming to be a powerful generalized resistance resource for the youth, the staff, the parents and the surrounding community, even if all this is not necessarily expressed in salutogenesis concepts and terms. The salutogenic model of health posits that this school likely contributes to strengthened sense of coherence for many people in the school’s psychosocial environment.

The school is also a repository of, or a portal to, some specific resistance resources:

- School guidance counsellors who help senior students make education and career choices
- A programme to support pregnant students to help keep them in school and socially integrated
- Special education teachers and facilities equipped to help students with learning disabilities
- Alert and effective connection to community child protection services

These specific resistance resources are present in or around the school, but they are not particularly salient to the adolescents that do not need them, and therefore do not use them. The school as a generalized resistance resource helps contribute in a general way to strengthen the sense of coherence of many pupils, and a strong sense of coherence facilitates the uptake/use of particular specific resistance resources when the need should arise. Let us consider two students. Jack has a typical day, experiencing ‘normal’ strain and hassles, but nothing out of the ordinary happens. Specific resistance resources abound, but this student makes use of none of them; they are not salient. On the same day, Jill discovers she is pregnant, and her sense of coherence is high enough that she does not panic, and sink into depression; rather, she contacts the pregnancy support programme, which she knows about and trusts because of the good experiences of other pupils. The pregnancy support programme is a specific resistance resource for this student, offering services that are highly salient at this particular point in her life.

There is a vexing equity dimension to this. If specific resistance resources are more readily available to those with lots of generalized resistance resources (e.g. money), specific resistance resources might actually contribute to a

widened equity gap. Equality in access to specific resistance resources depends on a reasonably fair distribution of generalized resistance resources, so health promotion needs to keep both types in focus.

The aim of this chapter has been modest, simply to illuminate a part of the salutogenic model of health that seems to be overlooked—specific resistance resources actually have as much or more relevance to health promotion practice as do generalized resistance resources. By drawing attention to the special nature of specific resistance resources, one also draws attention to what should be a core aim of health promotion: to ensure that availability of the right specific resistance resources at the right time is not all too often a matter of ‘chance or luck’, as Antonovsky worried.

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