The salutogenic model of health in health promotion research
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Abstract: Despite health promotion’s enthusiasm for the salutogenic model of health, researchers have paid little attention to Antonovsky’s central ideas about the ease/dis-ease continuum, defined in terms of ‘breakdown’ (the severity of pain and functional limitations, and the degree medical care is called for, irrespective of specific diseases). Rather, salutogenesis research has a strong focus on how sense of coherence relates to a wide range of specific diseases and illness endpoints. We address two questions: Why has Antonovsky’s health concept failed to stimulate research on breakdown, and how can the present emphasis on disease be complemented by an emphasis on positive well-being in the salutogenic model? We show that (i) the breakdown concept of health as specified by Antonovsky is circular in definition, (ii) it is not measured on the ‘required’ ease/dis-ease continuum, (iii) it is not measureable by any validated or reliability-tested assessment tool, and (iv) it has not so much been rejected by health promotion, as it has not been considered at all. We show that Antonovsky came to view breakdown as but one aspect of well-being. He was open to the idea of well-being as something more positive than the absence of pain, suffering and need for medical care. We suggest ways to move salutogenesis research in the direction of well-being in its positive sense. (Global Health Promotion, 2013; 20(2): 30–38)

Keywords: salutogenesis, health promotion, well-being

Health in the salutogenic model

Aaron Antonovsky’s most complete explanation of the salutogenic model of health is found in his book, Health, Stress and Coping (1). Figures 1 and 2 are reproduced from that book. The Figures are of considerable academic significance because they provide Antonovsky’s detailed conception of the model and his operational definition of health. Antonovsky expressed in many writings his conviction that the study of health was not the same as the study of disease, or of well-being (1–3). He characterised disease as a concept of importance to medical and public health work, in which the ability to make diagnoses divided people into two groups, sick or well. Antonovsky did not disparage this pathogenic orientation, but he did think it blinds us to ‘the subjective interpretation of the state of affairs of the person who is ill’ (1). Furthermore, since most of us are subjectively ill’ most of the time, it blinds us to the human condition.

The experience of health, Antonovsky propounded, is movement along a continuum of pain and suffering (ease/dis-ease), which he termed ‘breakdown’. The ease/dis-ease continuum has four dimensions along which we experience varying degrees of breakdown (1). First, what is the person’s experience of pain (rated on a four-point scale from not at all to severe)? Second, what is the person’s experience of functional limitation (rated on a four-point scale from not at all to severe)? Third, what is the person’s degree of functional limitation that is definable medically as having prognostic implications (rated on a six-point scale from not acute or chronic to serious, acute and life threatening)? Fourth, does prognosis imply that medical treatment is needed (rated on a four-point scale ranging from no particular health-related action to a requirement for active therapeutic intervention)?

He wrote about ‘profiles’ generated by various combinations of the four dimensions. Of 288

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(This manuscript was submitted on 13 March 2012. Following blind peer review, it was accepted for publication on 17 December 2012)

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Figure 1. The salutogenic model of health. Reproduced with permission from Antonovsky (1: 184–185)
possible profiles, two-thirds of women in his 1970 study were classified in just 14 profiles, and almost half fell in just six of the 288 possible profiles (4). A side note is that in his original paper (4) there were 288 possible types, while in Health, Stress and Coping (1), there are 384 possible types because of differences in the coding of ‘action implication’, changed from three coding categories in the 1973 paper to four categories in Health, Stress and Coping.

Four points are worth noting about Antonovsky’s concept of health. First, rather than being a true continuum, the ease/dis-ease construct as discussed by Antonovsky is a categorisation, similar to the sick/well categorisation of pathogenesis, except for having several meaningful categories instead of just two. He considered in detail various profiles, he referred to them as ‘types’, and he surmised that over time, people move from one breakdown type to another, either for better or for worse. He wrote about types as though they were diagnostic categories, and suggested that different types require different follow-up strategies (4).

Second, according to Antonovsky, health is synonymous to breakdown, which is synonymous to the ease/dis-ease continuum, which is defined by the degree of pain and suffering that one experiences, as spelled out in detail in Chapter 2 of Health, Stress and Coping (1). Hence to be at the ease end of the continuum (to be maximally healthy) is to have no

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**Figure 2. Definition of health. Reproduced with permission from Antonovsky (1: 65)**

- **A. Pain**
  1. not at all
  2. mildly
  3. moderately
  4. severely

- **B. Functional Limitation**
  1. not at all
  2. mildly
  3. moderately
  4. severely

- **C. Prognostic Implication**
  1. not acute or chronic
  2. mild, acute, and self-limiting
  3. mild, chronic, and stable
  4. serious, chronic, and stable
  5. serious, chronic, and degenerative
  6. serious, acute, and life-threatening

- **D. Action Implication**
  1. no particular health-related action
  2. efforts at reduction of known risk factors
  3. observation, supervision, or investigation by the health care system
  4. active therapeutic intervention
present experience of pain and suffering (profile
1-1-1-1). Returning to Antonovsky’s question about
why ‘some people’s health is such that they go
through life for some of the time with relatively little
pain and suffering’, Antonovsky asks, in a circular
effect, ‘why some people’s health is such that they go
through life for some of the time with relatively
good health?’

Third, Antonovsky explicitly rejected the World
Health Organization (WHO) definition of health,
stating that any ‘resemblance between [a] focus on
positive health and the problem of salutogenesis is
quite superficial’ (1). However, his insistence that
health and well-being are not the same takes on an
important degree of nuance when he writes ‘…the
health ease/dis-ease continuum is not to be regarded
as co-extensive with the entire realm of well-being’
(ibid). Reading Antonovsky’s later work (2) provides
a fuller understanding of Antonovsky’s (evolved)
position on the relationship of health to well-being.
In three passages in Unraveling the Mystery of
Health (2), he indicates his understanding that
health, as in the ease/dis-ease continuum, is an
aspect of a larger construct called well-being:

‘… I explicitly differentiate between the health
ease/dis-ease continuum and other aspects of
well-being.’ (ibid, p.179, italics ours)

‘…if one has [general resistance resources], there
will be consequences not only for the emergence
of a strong [sense of coherence] SOC, and
therefore health, but for other areas of well-being
as well’ (ibid, p.181, italics ours)

‘I would, of course, be flattered should other
investigators report data linking the SOC to other
aspects of well-being…’ meaning aspects other
than the ease/dis-ease continuum (ibid, p. 182,
italics ours)

In sum, Antonovsky came to conceive of the ease/
dis-ease continuum of breakdown as but one aspect
of well-being, and welcomed research on other
aspects of well-being. It is worth noting that for
Antonovsky the full continuum, including the dis-
ease end, was subsumed under the larger construct
of well-being.

The fourth point is that Antonovsky’s measure
of health is not feasible to use in health promotion
research. The full description of the measure was
published in his 1973 paper titled The utility of the
breakdown concept (4). The paper describes a study
conducted in 1970 of adjustment to menopause in
women of different ethnic groups. Five ethnic
samples were drawn from the Israeli Population
Registry (in 1970) of women aged 45–54, and these
samples were drawn from areas of ethnic
centration. The five groups comprised 1148
women who were interviewed and then invited to a
medical centre for a general medical examination.
Of these, 697 (61%) were examined. At the end of
the examination, and after a woman had left the
examination room, the examining physician
categorised her on the four dimensions already
described: pain, functional limitation, medical
condition and requirement for medical treatment.
Complete data were recorded for 680 women (59% of
the original sample).

In the 1973 paper Antonovsky discussed
methodological limitations of this health measure (4).
He mentioned that different physicians examined
different ethnic groups, and that no reliability or
validity tests of the physicians’ ratings were
undertaken. Yet this measure, and these data, had so
much currency for Antonovsky that his position on
the measurement of breakdown (e.g. health) on the
ease/dis-ease continuum, based on the four dimensions
assessed by the physicians, was exactly the same
almost a decade after the study was undertaken.
Examining Antonovsky’s exposition on health in
Unraveling the Mystery of Health – How People
Manage Stress and Stay Well (2), there is no reference
to additional research after the 1970 study, or any
change/advance in his conceptualisation of health.
Antonovsky barely mentioned health in his 1987
Unraveling the Mystery of Health – How People
Manage Stress and Stay Well (2). This is not a
shortfall, since the 1987 volume was intended to be
a detailed exposition on SOC. However, the little
attention he did give (2) confirms his steady
commitment to the health ease/dis-ease continuum.
This commitment is also evident in a 1996 paper in
Health Promotion International (3), based on a
conference presentation and published four years
after his death. He lamented that health promotion
had not gone so far as accepting the concept of
breakdown, but had, rather, ‘succumbed to the
powerful but unfortunate flaw which flows from the
dichotomous classification: the all-consuming
concern with risk factors, with pathogens’ (3).
However, the 1996 paper (3) also seems to reveal what final position he came to on the meaning of health with regard to the concept of well-being:

‘…the preponderance of the extant evidence is at least consistent with the SOC → health hypothesis. The correlations with a wide variety of measures of well-being and health on the one hand, and distress and maladaptation on the other, are consistently strong’. (p.16)

We may conclude that Antonovsky remained personally committed to his original conception of health as breakdown defined on an ease/dis-ease continuum. Yet he recognised that this was but one aspect of well-being, and welcomed evidence on the association of SOC to other aspects of well-being.

Summarising the points above, the breakdown concept of health as specified by Antonovsky is circular in definition, it is not measured on the ‘required’ continuum, it is not measureable by any validated or reliability-tested assessment tool, and it has hardly ever been used empirically (we cannot find any other study that used it besides Antonovsky’s study of menopausal Israeli women). It has not so much been rejected by health promotion, as it has not been considered at all. In Monica Eriksson’s doctoral dissertation (5), exhaustive tables are provided listing every health measure used in 458 analysed research reports. None of those reports used the single measure of health championed by Antonovsky, and indeed, many of the reports used measures of health that Antonovsky explicitly rejected as valid measures of health.

Well-being in health promotion research

While we conclude that the health construct as defined by Antonovsky is untenable, along with many others we still embrace the salutogenic model of health. This leaves us searching for ways to further enhance its role in health promotion research. One way of doing this could be to open the model up to other conceptions of well-being than the one originally described by Antonovsky. Opening up the salutogenic model would allow us to ask the important salutogenic question, extending it beyond health defined as the absence of pain, functional limitation, diagnosis and need for treatment. As already mentioned, in his later writing Antonovsky welcomed evidence on the association of SOC to other aspects of well-being.

We believe it strengthens the salutogenic model’s position as a theory of importance in health promotion research when it is made flexible enough to take up major developments in health promotion without violating the nature of the original model. The turn in recent years to positive aspects of well-being is one such major development in the health promotion arena. The point is not to reject Antonovsky’s conceptualisation of health, but to make explicit the possibility and desirability of measuring health and well-being by other methods than the one Antonovsky suggested.

Instruments for measuring disease, and consequently the absence of disease, are abundantly available, making these types of ‘health’ measures easy to go to, also for health promotion researchers. This type of measurement will remain important within health promotion research, but there is a need to boost measurement of the ‘other’ side of health – the admittedly less wieldy concept of well-being in a positive sense. We make the claim that for salutogenesis research to flourish beyond its present circle of devotees (and we are in that circle), there is a need for a heightened consciousness on which elements of health to measure, and also an increased awareness of relevant instruments for this measurement.

Before going further, we briefly address the question, ‘Why take this skeleton out of the closet’? It seems salutogenesis researchers have blithely substituted their own conceptions of health for Antonovsky’s, perhaps not even being fully aware what his conception was, and no one seems much bothered by it. For us, however, this is a nettle that irritates; we don’t wish to gloss it over, especially in our roles as teachers of health promotion. We think it important to recognise that while Antonovsky’s focus was on movement in the positive direction of the ease/dis-ease continuum, that continuum does not extend all the way to health as more than absence of disease.

Defining health

Philosophers pose and answer grand questions like ‘What is disease?’ and ‘What is health?’ and they are scathing in their critiques of one another’s ideas (see Boorse (6) for a particularly entertaining example of...
the repartee). Health promotion researchers and practitioners, on the other hand, have a primary interest in improving the health and well-being of humankind and focus less on logical ‘purity’ of disease, health and well-being constructs. With a constant focus on the evidence base for health promotion, we should be able to show empirical evidence that we contribute to the promotion of health as something more than absence of disease, and in addition to the prevention of disease. Evidence is valuable in advocacy for health. Increasingly, the health promotion evidence base is provided by qualitative research. However, for the present purpose we are concerned about quantitative research. In this type of research, we need to operationalise health to be able to measure it. Operationalisation of health therefore has a practical, valuable function, and to operationalise health, we need a clear awareness of which concepts we are working with.

In the remainder of this paper we raise three issues: i) whether it is likely we will ever agree on a single operational definition of health for health promotion research, ii) whether we really need such consensus to be able to conduct high-quality health promotion research, and iii) how can emphasis be shifted to research on positive aspects of well-being?

Ad (1), we can definitely state that there is an absence of consensus and a heated debate on the definitions of health. Health promoters generally hold in high regard the idealistic definition of the WHO, which has been subscribed to in the Alma Ata Declaration and in the Ottawa Charter:

‘Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.’ (7)

However, this definition is regarded as useless by many health promoters because its lofty aim is so clearly beyond reach, and defies measurement (8).

Ambitious approaches to definitions of the health concept, such as the WHO’s, are of a theoretical and inspirational nature. We do need inspiration, but we also need operationalisation. One of the major points of divergence in the debate on the health concept is whether there is a subjective element to health. One who claims the need for a completely objective definition of health is Boorse, who in his Biostatistical Theory defines health as statistical normality, down to the cellular level:

‘Health as freedom from disease is then statistical normality of function, i.e. the ability to perform all typical physiological functions with at least typical efficiency.’ (9)

According to Boorse, one of the main strengths of this definition is its objectivity and the absence of evaluative decisions:

‘If the pursuit of positive health forces a choice between incompatible excellences, it requires an evaluative decision – by client, physician, or society – about what life goals are worthy of pursuit. What it would be for a person to become healthier is no longer fixed by the concept of health until someone’s values are added on. This value-ladenness is the most striking difference between positive health and the traditional negative variety.’ (9)

Boorse praises the precision of ‘absence of disease’, with absence of disease as a well-defined point of zero abnormality, while there is a multitude of directions in which the ‘positive’ dimensions could go above and beyond this point.

Poles apart, the influential philosopher Nordenfelt emphasises how health should be closely connected to individual evaluation, in a definition focusing on realisation of goals:

‘A is completely healthy, if and only if A is in a bodily and mental state which is such that A is able to realize all his or her vital goals, given accepted circumstances.’ (10)

Nordenfelt presents elaborate arguments for the delimitation of ‘vital goals’ and ‘accepted circumstances’. Similar ideas are presented by Seedhouse (8–11). Seedhouse as well as Nordenfelt embrace the notion of subjective elements in health: individual goals and potentials are part of the defining equation for both. Antonovsky embraced the subjective conception of health, maintaining that a pure dichotomy of having disease or being well blinded us to ‘the subjective interpretation of the state of affairs of the person who is ill’ (1).

So, amongst many other definitions, health has been defined as the absence of disease, as a state of statistical normality, and as the ability to reach
goals, to cope, to function, and to produce (with the latter constructs from the WHO mental health definition). The nature of health is contested. The inclusion of well-being in health, as proclaimed in the Ottawa Charter, is not universally accepted, even by health promoters. Given the many strong opinions on how to define health, we conclude that it remains very unlikely that we can arrive at consensus on a health definition for health promotion research. At best, it would take so long to develop such a consensus that we would not be willing to await it passively.

This leads to the second issue: do we need such a consensus in order to produce high-quality health promotion research? Suggesting that we should be open to accepting a variety of views on health, Green and Tones state:

‘... [H]ealth is one of those abstract words, like love and beauty, that means different things to different people. However, we can confidently say that health is, and has always been, a significant value in people’s lives. If we do not acknowledge the contentious nature of health and have a sound understanding of the determinants of our preferred conceptualisation, it is unlikely that we will be able to develop incisive strategies for promoting it’ (12)

Could it be the same for health as for love and beauty? Is it possible, and is it desirable, to have only one definition of health that every health researcher and practitioner must adhere to? Some may strive for a stringency of this kind, and claim that a lack of consensus in a field is a sign of weakness, of insufficient scientific rigour. Others, including us, observe that academia thrives in the absence of consensus.

The discourse around health is not dissimilar to the paradigm war in Philosophy of Science – the heated debate on what constitutes ‘knowledge’, and on whether qualitative or quantitative methodology is superior. The increasingly common approach to this is the acceptance of the value of a plurality of approaches: the question determines the method – and therefore also the measurement approach.

Rather than try to arrive at consensus for the health concept for health promotion research, we suggest that health promotion adapt a pragmatic approach accepting various conceptualisations and measurement approaches. We are quite happy to settle for a diversity of approaches, with well-founded conceptualisations of various aspects of health. This ‘tapas table’ rather than ‘single dish’ approach, which is the present reality, has led to a rich, varied empirical production of health promotion research. This varied production may well be seen as enriching – a variety of perspectives generally adds depth of understanding to a motif.

Put another way, it is not only pragmatic, it is innervating, to accept that what researchers define as health is health, in the research context. An additional argument for this approach is that a common trait of the health definitions discussed above is that they are constructed through theoretical elaborations that do not provide guidance as to how concepts of health can be operationalised (a notable exception being Antonovsky’s operationalisation of the ease/dis-ease continuum). The argument put forth here is to accept the reality – an examination of the salutogenesis literature by Eriksson and Lindström (13) reveals that what salutogenesis researchers mean by health has an extraordinary range. However, that range does yet extend far enough into the realm of well-being, in its positive sense.

This leads to the third issue: how can health promotion research be rebalanced, to include more emphasis on positive aspects of well-being?

We believe that a necessary, even if not completely sufficient condition, is that health promotion researchers develop increased awareness about the availability and accessibility of ways in which to measure positive aspects of well-being. In addition to that, it would not do harm if the respectability of using positive well-being indicators increased, if funding for well-being research became much more generous, and if health promotion conferences and journals made much more room for well-being. Maybe it is time for the field of well-being research to ‘grow up and get organised’?

Optimistically, the starting point is not zero. There already exist several resources focussing on measurement of well-being at community, national and international levels. For example, The World Economic Forum report Well-being and Global Success contains some suggestions for such measurement, stating that comparability across countries will be an important aspect for future
well-being research (14). Another example is the Canadian Index of Wellbeing (15), which combines measurement at societal and individual levels, to a large degree utilising existing data in eight domains: community vitality, democratic engagement, education, environment, healthy populations, leisure and culture, living standards and time use.

There also exist a great many indicators of well-being at the individual level suitable for survey research. The New Economic Foundation is one source giving information on such measurement, presenting three recommended well-being measures (16). Yet another resource, the Positive Health Indicators project at the University of Bergen, has made an effort to map existing empirical research literature and collect information on alternatives for measurement of health as more than absence of disease (17). This has resulted in the database Positive Health Indicators, which is freely accessible online and has been developed with health promotion researchers’ needs in mind.

Conclusions

The salutogenic model of health poses the question ‘What are the origins of health?’, and in doing so, begs the question, ‘What is health?’ Antonovsky’s conception of health and its origins may seem a departure of ‘paradigm shift’ proportion from the pathogenic question ‘What are the origins of disease? Yet Antonovsky did not call for a shift to salutogenesis and away from pathogenesis; he championed a shift to a position with salutogenesis alongside pathogenesis. However, he worried that the field of health promotion was too drawn to research with disease in the focus, and wished to stimulate health promotion’s interest in a conception of health considered along a continuum of breakdown, from ease to dis-ease. As we have shown, despite the strong appeal of the salutogenic model, Antonovsky’s original idea about the nature of health has not been ascendant.

However, from the very beginning, Antonovsky was open to the study of health continua other than ease/dis-ease, as Figure 1 clearly shows. He was also open to alternative answers to the salutogenic question – his own answer was SOC. He came to conceive of the ease/dis-ease dimension as nested in the higher order construct well-being, and he was pleased that research on other dimensions of well-being (including disease) often gave the same answer to the salutogenic question that he came to – SOC.

Thus, the salutogenic model as shown in Figure 1 underwent development in Antonovsky’s thinking, even if he did not update the drawing along the way. We are convinced that Antonovsky would not today object to a modification to the model wherein well-being is the endpoint, within which its many dimensions may receive our attention. A focus on positive aspects of well-being is in concert with the spirit of health promotion, and not contrary to the fundamentals of the model. For health promotion research, this is a call for a shift from the current primary focus on disease, disability and poor functioning, to a more balanced approach in which positive aspects of well-being also receive attention. We have called attention to a few resources that help health promotion research operationalise well-being’s positive aspects.

Acknowledgements

We thank Drs Hege Vinje and Marguerite Daniel for their critical feedback on an earlier draft of this paper.

This article was initially submitted for publication in a supplement issue of Global Health Promotion on Innovative Avenues for Health Promotion Research, coordinated by the Global Working Group on Health Promotion Research of the International Union for Health Promotion and Education (IUHPE) and with the support of the Research Chair Community Approaches and Health inequalities of the University of Montreal, in Canada.

Funding

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Conflict of interest

None declared.

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