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*Health in Organization: toward a process-based view*

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## ***Health in Organization: toward a process-based view***

### **Abstract**

This paper reports on a collaborative project involving organization scholars and clinicians to examine the ways in which individual and organizational health are conceptualized in the literature. We illustrate how the use of systems theories (in this case complexity theory) in relation to organizational health introduces problems such as the risk of promoting organizational health at the expense of individual well-being. The phenomena of organizational health and individual health are often presented as having a symbiotic relationship and we suggest some circumstances where this is not the case. Our central argument is that we need to move beyond current conceptual limitations and move toward a more process-based model of health in organization rather than organizational health.

### **Keywords**

Complexity Theory, Health, Meaning, Organizational Health, Process, Systems Theory

## **Introduction**

The concept of organizational health first appeared in the literature over forty years ago and has been revisited by leading scholars on a regular basis ever since. In researching organizational health, the simple act of considering the terms organization and health in a single phrase points to the somewhat obvious conclusion that a productive approach might be to draw upon insights and knowledge developed by both organization theorists and clinicians. As such this paper follows the lead of others who have attempted to build bridges from the world of public health to organizational contexts (Quick and Quick, 2004). We discuss the organizational dimensions of health based on work conducted within an innovative, multi-disciplinary research centre populated by medics, biologists, psychologists and organization theorists<sup>1</sup>.

Much work has already been done on the concepts of individual and organizational health (e.g. Cooper and Williams, 1994; Newell, 1995). With the possible exception of those working in public health, most clinicians consider health as something observed in individuals and measured in terms of a particular state at a specific point in time. However, real difficulties remain when translating this notion of individual health into organizational equivalents. We will argue that, although individual and organizational health are often portrayed as having a symbiotic relationship with each other, this relationship is poorly understood.

The argument that organizational and individual health are interdependent (Pritchard et al., 1990) suggests that systems theory may offer relevant insights. The paper reviews seminal views on systems theory, and offers a more detailed discussion of subsequent developments in the field of complex adaptive systems theory. This produces a view of organizational health as an emergent system-state but points to an unexplored contradiction in the notion of simultaneously optimizing individual and organizational health. We then consider some examples of attempts to improve organizational health, based on current conceptualizations in the literature, which

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<sup>1</sup> The Glasgow Centre for Population Health (GCPH) was established with Scottish Executive funding to address the persistently poor health record of the city of Glasgow compared to other similar cities in Western Europe.

appear to produce inadvertent and detrimental effects upon individual health. We argue that organizational health is often invoked as a concept in order to justify or rationalise courses of action that may in fact harm individual health outcomes.

Finally, the paper draws on a range of literatures, including clinical research, to develop a view of health in terms of processes rather than states. We argue that we need urgently to move toward a more process-based model of “health in organization” rather than “organizational health.” The paper concludes with three propositions which argue that health is created, at least in part, in social interactions – many of which are experienced in organizational settings of some form or another.

## **Defining Health**

In medical terms, the most widely agreed definition of health is as “... a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.” (WHO, 1948). For most purposes this definition is adequate, offering as it does an holistic interpretation of health that is not rooted in a medical or pathological paradigm. It also points to health as a means to an end rather than as some abstract state. It expresses health in functional terms as a resource that permits people to lead individually, socially and economically productive lives.

However, objections have been raised about this definition. Health has many dimensions (anatomical, physiological, mental and social) but it is also largely culturally defined. For example, the relative importance of various disabilities is in part dependent upon the cultural setting in which they occur and the role of individual concerned. This observation takes on particular significance in the context of this special issue on organizational health since it implies that organizational culture may play an important role. We therefore believe that a comprehensive definition of health is unlikely unless it reflects the sociological realities of an individual’s life. More pragmatically, the WHO definition is somewhat idealistic, unattainable and restrictive since it precludes most individuals claiming to be healthy. As Sorge and Van Witteloostuijn point out, medicine is very pragmatic and health as we, and the doctor, see it, may be less than we would like (2004: 1221).

However, our fundamental objection to defining health in the terms used by the WHO is that it describes health as a *state*. The notion of an individual as healthy if they exist in a *state* in which they *feel well* overlooks the reality that well being is the result of a *series of processes* in which the individual interacts with other people and the environment. A sense of well-being is the product, at any moment in time, of these interactions<sup>2</sup>. The focus on “states” draws attention to snapshot outcomes, rather than the myriad processes that produce these outcomes.

This paper represents a movement toward a process view of health. People often refer to periodic health or medical checks as an MOT<sup>3</sup>, comparing the experience to that of having one’s annual car inspection by an approved mechanic. The notion of health as state connects firmly with an approach which checks health through a variety of measures. The assumption is that results which fall within certain limits attest to an absence of faults. The real issue when faults are detected is not simply what they are, but what processes have produced them. If the fault relates to worn tyres or engine parts these may be replaced. If however, the driver, the route and the driving patterns remain the same, they will require similar interventions one year later. No amount of corrective action on the state of “health” will affect the processes which generate these states.

Whilst we may be unable to furnish a definition of health as a process at this point, we have some grounds for stating that we should refocus at least some our attention away from the outcomes of the daily interactions that produce health or disease and onto the interactions themselves. Only when we address pathologies at the level of our temporal processes of interaction in everyday life, *i.e. when we address what we do with each other*, will we approach the generative dimension of health and well-being with a view to *designing health in as opposed to screening disease out*.

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<sup>2</sup> The Executive Board of the World Health Organization recommended in 1998 that its constitution should be amended to define health as “a *dynamic* state of complete physical, mental, spiritual and social wellbeing and not merely the absence of disease or infirmity,” but as yet this change has not been implemented.

<sup>3</sup> In the UK an MOT is an annual check of the roadworthiness of a vehicle.

Moving to the organizational level, any attempt to pin down a clear definition of health becomes even more problematic. Warren Bennis was one of the first to alight on the notion of organizational health on the basis that traditional ways of measuring organizational effectiveness did not adequately reflect a broader concept of organizational health (1962). His rationale was that there might be some balance to be struck between organizational performance measures and individual and collective health. As we shall see later, this basic conceptualization persists today and is one of our main critiques of existing research on organizational health. When Bennis applied mental health thinking to organizational settings, he identified three dimensions of organizational health: adaptability, coherence of identity and the ability to perceive the world correctly. Though helpful, these criteria fall some way short of the level of technical specificity of terms and definitions commonly found in some fields of study<sup>4</sup>. Nevertheless, such attempts to infer a definition of organizational health from those used in relation to individuals, produces a positive image of the healthy organization as one that is comfortable with its own place in the world. This view is echoed by another senior scholar, Frederick Herzberg, who notes that individual growth is the key to organizational health and that (at the time he was writing) a real problem was the way in which mass production techniques robbed many jobs of meaning (1974). Perhaps without realizing it, both Bennis and Herzberg point to a symbiotic relationship between individual health and organizational health.

Since this early treatment of health in organizational settings there has, of course, been an explosion of interest in the topic area. In particular, specific work on stress in the workplace has been the subject of much research and it is reasonably well established that the physical and mental health of individual workers can be affected by increased stress levels at work (Cunha and Cooper, 2002). However, the situation remains that organizational health is a widely used but poorly defined concept and that the existing literature does not provide or permit a succinct definition (McHugh et al., 2003:16). If we appear to be no closer to a specific definition of organizational health, perhaps the field is yet to emerge from what Parkhe describes as the preparadigmatic phase (1993). Much of the research in this field appears to start from the position that some balance needs to be struck between organizational performance

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<sup>4</sup> See W Ross Ashby's discussion of the definition of terms in his seminal piece "Principles of the Self-Organizing System." (1962)

metrics and individual health in order to produce a hybrid notion of organizational health. The Organizational Health Report Index (Fiorelli, 1998) and the Healthy Work Organizations Model (Murphy, 1995, 1996) both adopt this line, offering structured frameworks relating organizational characteristics such as management practices, culture and values to organizational health as well as individual health outcomes.

Running alongside this tendency to conceptualize organizational health as the integration of individual health outcomes and organizational performance, there remains the suspicion, first alluded to by Bennis and Herzberg, that these variables are positively correlated. Brache makes this point (2001) and indeed a major validation study for the Healthy Work Organization Model concluded that management practices held the promise of “preventing work-related stress whilst simultaneously promoting organizational effectiveness” (Browne, 2002: 212). Gabriel offers an interesting counterview in claiming that organizations can be effective despite individual suffering (quoted in Driver, 2003: 46). In part, Kets de Vries concurs when he observes that organizational health may be a consultant’s fantasy (op cit: 46-47). Previous exploratory work points to a more sophisticated relationship between the concepts of health and disease, particularly in organizational settings (MacLean and MacIntosh, 1998). In this paper, we argue that the concept of organizational health emerging from the literature to date is heavily influenced by broader discourses such as those in systems theory. We believe that current conceptualizations of organizational health may produce an inadvertent and unnecessary tendency to polarize aspects of organizational health, creating tensions where none might actually exist.

Though the development of standard survey instruments might imply greater clarity about the definition of what organizational health means, we agree with McHugh and Brotherton when they point out that “models of the healthy organization appear exceptionally general ... [and] they fail to highlight the web of linkages which are likely to exist between financial performance, management processes, functions and behaviours” (2000: 745). Indeed, this claim is borne out in their own study of organizational health which falls back on financial metrics perhaps because it is one of the few things that it is possible to measure.

Beyond Jaffe's observation that the two factors which comprise organization health are organizational performance and worker health / satisfaction outcomes (1995), our purpose here is not to propose a definition of organizational health. Indeed, we spend much of the remainder of the paper exploring some misgivings about the feasibility of such an endeavour. Rather, at this stage, we simply hope to have drawn attention to the ways in which health is described, in relation to both individuals and organizations, in both the organizational and the medical literatures. We support the view that health is a process not a static state. Furthermore, we would argue that health is created through the interaction of biological, psychological and organizational processes. To view individual health as a state may unduly limit our expectations of the opportunity to create both health and ill health within organizational settings. Also, the generalized assumption, seen in some work, that individual and organizational health are positively correlated may not be valid.

### **Systems Theory, Complexity Theory and Health**

We now turn our attention to systems theory. We begin by considering the ways in which seminal concepts from systems theory, such as the relationship between the parts and the whole, may apply to the relationship between individual and organizational health. We then move on to discuss more recent developments in systems theory, specifically complexity theory and complex adaptive systems, to further problematize the notion of organizational health.

Systems theory was developed by a range of scholars as a means of analyzing and engaging with a range of issues in complex (organizational) systems (see Ashby, 1962, Boulding, 1956, Churchman, 1968). At heart, systems theory deals with two main issues: first, the relationship between the components of a system and the whole and second, the relationship between the system and its environment (with the obvious exception of studying closed systems). These central concerns have drawn the attention of many researchers in the field of organization and management, e.g. in relation to learning (Argyris and Schon, 1978; Senge, 1990). Indeed, the strategy literature often demonstrates a concern with relationship to the environment (the

positioning school) and the relationship between components and the whole (the resource based view) in ways which we would interpret as being influenced by systems theory even when this is not explicitly acknowledged. Similarly, we now consider the effects of systems theoretic approaches on thinking about the relationship between individual and organizational health.

In systems theory a recurrent theme is the thorny problem of intervening in a system to effect improvement and the way(s) in which localised actions relate to system-wide betterment. Churchman argued that the criteria for determining success in relation to the parts in isolation are often the reverse of the criteria for success from the viewpoint of the whole (1968: 55). Translated to the concerns of this paper, Churchman's observation may mean that attempts to improve the health of the individual actors in an organization may be in tension with the health of the organization as a whole if this is measured using a framework such as the Healthy Work Organization model. As we shall see, this historical concern is underlined by more recent developments in the field of complexity theory. We will explore these developments in some detail to illustrate this key point about the relationship between optimization at component and collective levels. This will help deepen our understanding of the ways in which systems theoretic approaches could be problematic in relation to current conceptualizations of organizational health.

The new science of complexity theory is in some ways the latest development of systems theory and describes systems which are capable of spontaneously reconfiguring themselves through the repeated application of simple, order generating rules in a process known as self-organization (Coveney and Highfield 1995; Jantsch 1980; Kauffman 1993; Stacey, 1993). Non-linearity, positive feedback, interconnectedness and far-from-equilibrium conditions are the key concepts in understanding the nature of these self-organising processes<sup>5</sup>.

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<sup>5</sup> An in-depth description of complexity theory and its origins would be inappropriate here; interested readers can find such descriptions elsewhere (see Waldrop, 1992; Coveney and Highfield, 1995). Justifications of the use of complexity theory to study organizations have been established (McKelvey, 1997; Matthews et al., 1999) and arguments that these concepts might be important to managers can also be found in the literature (Andersen, 1999; Lewin, 1999).

Research on complexity theory in the natural sciences began to shed new light on the ways in which systems undergo change, with much attention devoted to the notion that this occurred on “the edge of chaos.” Rather than experiencing periods of relative stability interrupted by episodes or punctuations, researchers in the field of biology (e.g. Kauffman 1993; Solé et al. 1993) argued that systems could exist in a zone on this edge of chaos. This view is most frequently associated with work in so-called living systems (e.g. insect colonies, organisms, the human body, neural networks, etc.). Goodwin, (1994: 169) claims that “complex, non-linear dynamic systems with rich networks of interacting elements [have a zone which] ... lies between a region of chaotic behavior and one that is frozen, with little spontaneous activity.” Systems on the edge of chaos appear constantly to adapt, self-organizing again and again to create configurations that ensure compatibility with the ever-changing environment. This perpetual fluidity is regarded as the norm in systems on the edge of chaos, as opposed to a periodic feature of systems that undergo transformations from one stable state to another.

It has been noted that “the edge of chaos is a good place to be in a constantly changing world because from there you can always explore the patterns of order that are available and try them out ... you should avoid becoming stuck in one state of order which is bound to become obsolete sooner or later.” (Brian Goodwin quoted in Coveney and Highfield, 1995: 273).

In organizational writing, the concept of an organizational edge of chaos has been popularised with proponents claiming that the level of innovation and creativity it confers on organizations may offer a source of competitive advantage (Brown and Eisenhardt, 1998). Such organizations are said to “transcend fixed structures and centralized control; they are systems or processes that produce a constant stream of structural change throughout the organization” (Halal, 1993: 40). The visibility of early work at the Santa-Fe Institute and the broad popular appeal of associated books on the new science (e.g. Waldrop, 1992; Wheatley, 1992) saw the edge of chaos develop into something of a saleable brand during the 1990s. Populist managerial texts offered advice on “living on the edge” (Youngblood and Renesch, 1997) and “leading at the edge” (Conner, 1998), whilst management consultants used the concept in relation to organizational strategy (see Beinhocker, 1997).

Despite this popularity however, Pascale, (1999: 85) notes that “one cannot direct a living system, only disturb it.” Furthermore, Stacey’s extensive work in this area (1991, 1995, 2003) centres on the assertion that we cannot accurately predict (or control) what happens in the future. For those adopting this view of organizations, the roots of unmanageability can be found in the fact that systems on the edge of chaos are both extremely sensitive to initial conditions and highly non-linear in evolutionary terms. A number of authors argue that acknowledgement of this fact should be central to the quest to develop new ways of “managing” our organizations (e.g. Shaw, 1997, Stacey 2001, Streatfield, 2001).

One of the critical issues in developing new ways of managing is “to figure out what to structure, and as essential, what not to structure” (Brown and Eisenhardt, 1998: 12). Maguire and McKelvey, (1999: 31) point out that “the edge of chaos is not something which is necessarily there that managers have to contend with ... it is a region that they create, consciously or inadvertently.” In the light of these observations, and in the face of the “tenuous connection between cause and effect” (Pascale, 1999: 92), an obvious conclusion would be to question just what managers could do in the pursuit of organizational health.

The edge of chaos is presented the natural state, toward which all systems evolve. If this is the case, perhaps organizational performance and individual worker health might both be optimized at the edge of chaos ? However, Churchman’s observations about optimization and sub-optimization in systems, indicates that such a claim might merits further exploration and evaluation.

We have now outlined some of the theoretical challenges in improving systems-wide properties, such as organizational health. Systems thinking suggests that local / individual improvements may be in conflict with the requirements of the system as a whole. More recently, complexity theory, suggests that there may be problems in improving organizational health since they cast doubt over the ability of managers to “control” systems-wide parameters like health.

## **Health as an Emergent Property**

To help crystallize what we mean by a more process-based view of health, we now introduce some illustrative examples. These are drawn from earlier research and are offered purely as a means of grounding our theorizing in some organizational stories.

First, let us examine an organization we came into contact with some time ago. The organization had been in business for over sixty years and had been extremely successful in the past. The present however was characterised by shrinking profit margins, decreasing market share, a distinct lack of new products, rigid working practices, high staff turnover, poor morale and an acceptance that things were not going well (MacIntosh and MacLean, 1999).

The organization's owners perceived it as being diseased in some way; indeed it was this perception and subscription to health as a metaphor that led them to contact us. In discussions, managers contrasted their image of the organization with the description of a "healthy organization" which for them would be innovative, vibrant, flexible, profitable and typically a source of some pride for its employees. In the terms of the healthy work organization model referred to in the introduction, this concern focused on the "organizational health" dimension; concern for individuals was expressed as a somewhat frustrated desire for higher degrees of participation and lower levels of absenteeism and departure.

The owners' description suggested an organization that was somehow removed from "the edge". Some theorists depict the fluid, flexible conditions of the edge of chaos as a natural state for organizations, and (neatly sidestepping their own descriptions of unpredictability and uncontrollability) exhort managers to increase internal connectivity, instability and fluidity, so as to restore a natural sense of vibrancy whilst avoiding the equilibrium which is connoted with unnatural, mechanistic management. Some even argue that such equilibrium is "the precursor to death" (Pascale, 1999). Managers then, are styled as architects, capable of adopting a vantage point external to the organization and in so doing, able to maintain its position on the edge of chaos. For us, the logical extension is that this in turn maintains organizational health at least in the terms of the Healthy Work Organization model.

Working with this organization, led us into a period of research where we surveyed managers in a range of public and private organizations who claimed to be actively working with the edge of chaos model (MacLean and MacIntosh, 2002). One of our concerns was to understand the experience of individuals working in so-called edge of chaos organizations. From a range of twenty-five organizations, studied over a five-year period we drew some surprising findings. Where the literature described the edge of chaos as the natural state for systems, only two of the organizations we studied achieved behaviours consistent with the suggested levels of fluidity, innovation and performance. Most strikingly, and contrary to the advice available in the literature (e.g. from Brown and Eisenhardt, 1998), managers who appeared to achieve organizational behaviours consistent with the edge of chaos did so by using practices such as rapid job rotation (to avoid inertia and comfort zones developing), high performance demands (such extremely aggressive growth rates) and most significantly of all, circulating organizational fictions. The use of rumour and counter rumour to destabilise the organization was a deliberate policy which appeared in some circumstances to produce outstanding performance but which also produced a high stress environment and significant employee turnover. The achievement of organizational performance on the edge of chaos appeared inconsistent with attempts to improve individual health. We have already acknowledged that the literature on individual health in the workplace presents seems clearly to indicate that practices that induce such a stressful environment would be detrimental to individual health (Cartwright and Cooper, 1993; Cooper and Cartwright, 1994). Here however, we found a system theoretic informed approach to place the organization on the edge of chaos which placed individual health and organizational performance in tension.

Indeed Stacey (2001) qualifies his early view of organizations as naturally complex adaptive by stating that more rigid mechanical hierarchies may emerge as a response to anxiety and power asymmetries, a view supported by our own work which witnessed a tendency towards stasis and traditional authority structures as emergent forms of dealing with anxiety and uncertainty in a newly formed public body (Houchin and MacLean, 2005).

Perhaps these observations explain why other complexity theorists have adopted the dissipative structures model as an alternative to the edge of chaos (Prigogine and

Stengers, 1984). In this case, organizational equilibrium is seen as the inevitable outcome of saturated learning processes and the accumulation of defensive routines (MacIntosh and MacLean, 1999). In contrast with the edge of chaos view, organizations are seen less as naturally changeful phenomena that need managerial help to stay on “the edge” - but more as achievements of human design that are a direct response to an otherwise overwhelmingly changeful natural world (Tsoukas and Chia, 2002). However, in this latter view, dissipative structures theory is invoked to justify the managerial use of major destabilising events to precipitate and manage strategic change. Organizations are encouraged to descend “into chaos” as the only means of escaping the existing order and establishing some new order on the other side of a concentrated episode of uncertainty and change (MacIntosh and MacLean, 1999). Obviously, the period of transition implies uncertainty, anxiety and stress, but not as an everlasting state.

It therefore appears that, though different in their theoretical stance as regards episodic or continuous strategic change, the two main complexity theory models employed by managerial and systems thinkers both result in a view of modern management that equates organizational health with practices that, for individuals, may produce just the opposite effect. Whether the period of change experienced is concentrated into a particular time frame (as in dissipative structures) or is intended to be ever-present change (as with the edge of chaos), organizational performance may improve whilst the health outcomes for those working within the organization deteriorate.

Perhaps this tension between individual and organizational outcomes is rooted in a tendency for management research to use models and concepts that originate in the natural sciences in unquestioning and metaphorical ways. However, the tendency to depict managers as objective manipulators of system parameters overlooks fundamental issues that may distinguish organizational systems from the natural sciences counterparts – issues such as subjectivity, meaning and power. Our contention is that if we are to examine the emergence of health in organizations, we have to combine some of the insights from complexity theory, such as self-organization and the importance of local interactions in creating global emergent outcomes, with established and compatible lines of thinking on social theory.

## **Revisiting Health in Organization**

We return now to our earlier reluctance to offer a definition of organizational health. Instead of focussing on some integrated mix of organizational performance and individual worker outcomes, we believe it is more helpful to discuss “health in organization.” That is, health as something created in organizational and social processes of interaction. Whilst we do not offer a definition of organizational health, we do develop a series of propositions about health in organization.

Much of our understanding of how health is created comes from studies of the relationship between socio-economic status and health. However, behavioural explanations that attribute the poor health of those in lower socio-economic groups to smoking, alcohol and dietary habits do not account for the difference in health experience (Marmot, 1987). Instead, attention in recent years has moved towards psychosocial theories of health status to explain many of the observations which link health and social position. It has been suggested that individuals from lower socio-economic groups are less able to cope with the stresses of difficult social pressures and that excess stress has damaging biological effects (Susser et al., 1985). Other authors have built upon this hypothesis and pointed to the importance of a sense of control over one’s life as an important factor in building resilience and minimising the impact of stress both in clinical (McCubbin 1997; Williams and Collins 1995; Syme 1991) and organizational research (e.g. Bordia et al., 2004). Kosteniuk and Dickinson (2003) found, in a study of 17,000 Canadians that higher income is associated with better health and that lower levels of control, self esteem and social support are associated with greater stress and poorer levels of self-reported health.

For us, issues such as level of control are organizational phenomena and there appears to be an emerging hypothesis about the way in which health can be created in organization. This hypothesis postulates a close relationship between social, psychological and biological aspects of health. Social circumstances have biological effects and they are, at least in part, mediated through psychological pathways associated with the body’s response to external stress. Supporting this assertion, a study of the effect of beta-blockers on men who had a history of heart attack found

that these drugs reduced the risk of death from a subsequent heart attack but that the beneficial effects were not evident in men who experienced high levels of social isolation and life stress (Ruberman et al 1984). Again, the translation of social isolation to organizational settings draws in a number of common concerns such as organizational culture, power, politics, etc.

A number of psychological constructs have been offered as a means of explaining this interrelationship between social, psychological and biological determinants of health. We believe that an important concept, bridging the worlds of sociology and psychology, is that of Sense of Coherence as advanced by Antonovsky which relates inner resources to the ability to react successfully to life's challenges (1987a). Here we can see an overlap with Bennis's view that organizational health related to clarity of identity. Antonovsky defined Sense of Coherence as:

*“A global orientation that expresses the extent to which one has a pervasive and enduring feeling of confidence in the predictability and explicability of stimuli deriving from internal and external environments (i.e. comprehensibility); that resources are available to meet the demands of the stimuli (i.e. manageability); and that those demands are challenges worthy of investment and engagement (i.e. meaningfulness”) (1987a: 19)*

Changes in organizational conditions may, even for older individuals, substantially change the strength of SoC (Feldt et al., 2000). Such modifications can in turn have tangible effects on an individual's health (Antonovsky, 1987a,b). Carmel and Bernstein (1990) found a connection between environmental change and changes in SoC. In a three-stage, two-year follow-up study, the SoC of medical students decreased systematically over the period, in line with increased workloads.

Whilst these observations have been made by clinical researchers, we believe that they have great significance to the field of organizational research. The contribution of Antonovsky and others, points toward the social creation and maintenance of meaning as playing a key role in health. Connections can be built between predictability, comprehensibility and manageability on the one hand, and the nature of organizational and managerial practices on the other.

Clearly, those organizational practices described earlier as producing edge of chaos style behaviours (peddling untruths, elevating stress, rotating staff, setting aggressive growth targets) could be argued as having produced valuable organizational performance outcomes whilst reducing individual SoC for those working in the organization. Interestingly, in the natural sciences, where the elements of the system may be particles, chemicals or organisms, this implied tension between overall systems performance and individual SoC would not apply. Indeed, as we have stated, proponents of the edge of chaos view argue that systems naturally maintain themselves in a state of perpetual fluidity. However, our work in organizational settings does indicate that the gradual loss of individual SoC, marked by an increase in anxiety (Houchin and MacLean, 2005), would imply that short term and long term performance may have a problematic relationship in this regard. In our view, an underlying problem here may be the use of performance measures which do not incorporate sustainability and which tend to focus on snapshots rather than longitudinal processes. Sustainability is important here because there is a need to balance short and long term outcomes. Consider the alleged profit-maximizing behaviour of firms in classical micro-economic theory. One could maximize profits by taking as much as one could in a short time, or run the risk of taking less at any point in time but cumulatively gathering more profit. There is a balancing act to be effected between quick gains that may run the risk of “burn out” for individuals in pursuit of an organizational optimum, and more sustainable approach to development that couples the development of the organization with the development of the individuals that comprise it over a longer timescale.

Hence our first proposition is that *current conceptualizations of organizational health, as described earlier in the paper, introduce unhelpful tensions between individual and collective outcomes because they often overlook a temporal dimension and issues of sustainability.*

Focussing on sustainability turns the emphasis away from often arbitrarily selected states, events and outcomes, and instead draws attention toward the temporal interconnections and interdependencies between them. This focus on the interrelatedness of events through time, points toward the adoption of a process

perspective, i.e. that our attention is turned from statistically aggregated health outcomes at the collective level to the individual processes of interaction which produce such outcomes. Hence, our second proposition is that *conceptualizing health in organization from a process perspective is more appropriate than a view of organizational health as a state*.

Having argued the importance of a temporal dimension, we also believe that meaning is crucial. Alongside SoC, Antonovsky's work points to the central role of meaning and this makes Herzberg's comment (quoted earlier) that much work is devoid of meaning, all the more important. For us, meaning and identity are relational phenomena that emerge in context, where context is simply the network of interactions in which individuals engage. Ralph Stacey and his colleagues have begun to combine insights from social psychology and sociology to suggest that it is patterns of power and meaning expressed in local interaction which constitutes our experience of organizations.

In moving toward a process-based view of health, we are arguing for a richer and more dynamic exploration of a complex phenomenon. Hence, our third and final proposition is that *in factoring sustainability into our theorizing of health in organization, we should include explicit consideration of the ways in which individuals negotiate meaning and identity in the course of their daily organizational life, and in so doing enhance or erode their sense of coherence*.

## **Conclusions**

The aim of this paper was to consider the ways in which the relationship between individual and organizational health are conceptualized, and in particular, to explore the implications of adopting a systems theoretic approach. We have identified some contradictions which arise with the use of systems theory in relation to organizational health if one is trying to simultaneously improve organizational performance and individual worker outcomes, since these are the two most commonly cited dimensions of some integrative notion of organizational health. Further, we have illustrated how the application of recent systems approaches such as complexity theory might give rise to practices that promote organizational health at the expense of individual well-

being. We have shown that managerial practices which focus on outcomes as system-wide states can inadvertently assume that if the system is healthy, its “elements” will be healthy. Whilst not denying this as a possibility, we would suggest that we have identified sufficient grounds for questioning the assumption of a symbiotic relationship between individual and organizational health. Indeed, organizations might cite the latest managerial thinking as a justification for engaging in activities which have detrimental health effects for their employees. In a context where managerial accountability to shareholders for organizational performance is part of the governance apparatus, yet managing individual health outcomes is not, this is perhaps understandable.

An obvious critique of the majority of systemic views of organization lies in the general avoidance in such perspectives of familiar organizational issues such as power, sense of control, sense of coherence or meaning. We have argued that such issues are central to the creation of health. Research conducted within the Glasgow Centre for Population Health represents one attempt to study the behaviour of systems and systems dynamics in a way that is sensitive to the unique aspects of human experience. Our own research seeks alternatives to traditional mechanistic views of organization, and beyond more recent systems views, in search of a theory of organization that accounts for the contribution of organizational experience and practice to the health of those concerned.

Some critics of systems theory have pointed to an alternative conceptualisation based on process as opposed to system. In such views, the modernist dichotomy of human experience into individual and collective, is replaced by a focus on the ongoing iteration of temporal processes of human interaction (Stacey 2001). The common focus of such work, based on the traditions of pragmatist philosophy, is on the nature and qualities of patterns of human interaction and their roles in the creation and negotiation of meaning. Joas (1996), also drawing on philosophical pragmatism, has developed a theory which explains how such processes of intentional interaction both create, and are created by, the individual biographies of those concerned, providing an alternative conception of how social processes of identification are linked back to the embodied physiology of individual actors, i.e. how organizational experience may be linked to health. In our opinion, these ideas point the way toward a body of research

which retains interesting themes such as emergence and unpredictability from complexity theory, but locates them in a framework in which social phenomena such as qualities of relationship, power dynamics and human creativity are also given due consideration. Critically, in moving to a process-oriented view of health, we would suggest moving from the concept of organizational health (as some hybrid or integrative phenomenon) to one of health in organization i.e. that health emerges in organizational settings.

This paper draws on theoretical work undertaken within the Glasgow Centre for Population Health. Moving from theoretical work to an empirical phase, our aim is to develop the ideas presented in this paper and to provide those working in organizations with an alternative way of conceptualising the link between everyday experiences of organizational life and individual health outcomes. We have already developed a framework for action<sup>6</sup> based on the conceptual work presented here. In many ways this aims to build on the work of Bennis who first drew attention away from the “hard” performance measures of organizational health and towards the more subjective issues of identity and meaning. Bennis suggested that the healthy organization would be one that was comfortable with its own place in the world. Based on the arguments presented in this paper, we suspect that individuals will experience a greater Sense of Coherence when they are comfortable with their place in the organization. Indeed, it may be time to move even further in the direction started by Bennis, i.e. not simply away from hard measures of organizational health, but away from the notion of “organizational health” and toward a processual view of health in organization.

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<sup>6</sup> Available from the GCPH web-site



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