

A decorative graphic on the left side of the slide, consisting of three overlapping circular frames. The top frame shows solar panels in front of industrial chimneys. The middle frame shows a large industrial facility with several tall cooling towers and a body of water. The bottom frame shows a helicopter performing a hoist rescue or maintenance on a high-voltage power line tower. The frames are connected by a series of overlapping lines that form a vertical path.

How to Foster Collective Sensemaking For a More Resilient Outcome to Power System Incidents

November 2019

- Eskom?
- Ecological?
- Engineering?
- Other?

Social
infrastructure



General Social
Resilience

Technical
infrastructure



Specified resilience



General resilience

Antonovsky's sense of coherence (SoC) was used in the assessment as a measure of personal resilience and sensemaking effectiveness.

How people make sense of the stressors of daily life, determines their response - which in turn determines their resilience [15]. The positive traits associated with this process, are referred to as a healthy sense of coherence (SoC). Someone with a healthy SoC tends to arrive at an internal viewpoint that provides them with adequate strength to match the demands and challenges of their external world. SoC is a tacit resilience resource that consists of three interrelated dimensions: comprehensibility, manageability, and meaningfulness. People with a high SoC can: (i) cognitively comprehend what is going on; (ii) make sense of how to manage the situation at hand; and, most importantly, (iii) see that the effort required is worth their unique contribution or investment [16]. SoC is a subjective measure, developed to quantify a person's general outlook on life, that predispose people with psychological resilience and health, in spite of being exposed to stressful or threatening circumstances [17]. In this sense, SoC reflects a sensemaking capacity that enables a more resilient outcome in times of uncertainty and ambiguity [18].

ENHANCING COMPREHENSIBILITY AT THE SYSTEMS-LEVEL

The first aspect of SoC is comprehensibility. People see the world as comprehensible if they cognitively understand what is happening around them [34]. Comprehensibility is a cognitive competency. Cognitive competencies can be strengthened, through skills such as problem solving, critical and creative thinking, and learning competencies to enhance personal resilience [35], [36]. A person's perception of comprehensibility allows them to act with greater confidence, given the sense that that they *know what to do*, and *why*. Understanding of one's context is the beginning of the ability to do something about it.

ENHANCE MANAGEABILITY AT THE SYSTEMS-LEVEL

The second aspect of SoC is manageability. People conclude that the world is manageable if they believe that the resources required to deal with the demands posed by the world are available, and can be mobilised [34]. Manageability in SoC relates to the perception that a person will have the required resources available to respond to a situation. The conviction that a situation can be managed does not depend on a person already being in possession of the required resources, but that they can access what they need through their social networks. Manageability is an interpersonal competency that relates to successful interaction with others.

1. ENHANCE MEANINGFULNESS AT THE SYSTEMS-LEVEL

The final, but most significant aspect of SoC is meaningfulness, or purpose, which has been shown to be the strongest contributor to resilience. People see challenges as meaningful if they have the motivation to invest time and effort into such challenges [34], [41]. Meaningfulness is an intrapersonal competency that arises from within the individual. Intrapersonal competencies can be strengthened through skills such as self-efficacy, initiative, perseverance and integrity to enhance personal resilience [35], [36]. Antonovsky describe meaningfulness as the emotional face of comprehensibility – the perception that life is emotionally sensible and worthwhile [15].

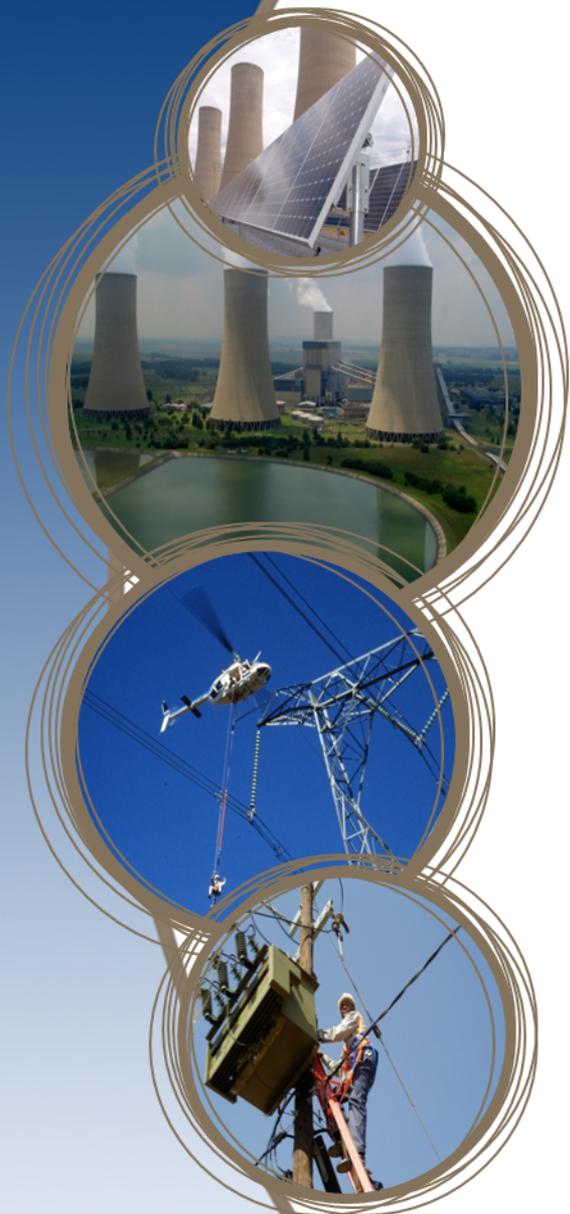
SoC vs 4IR

SoC > (*x*)

- The word disruption can be applied equally to either situation
- The context is changing faster than normal processes can evolve to meet it
- The skills available for normal business might not be the right ones under disruption
- It's difficult to know what kind of technology and responses are going to be needed for unexpected disruptions
- Not responding well to both emergencies and industry disruption, could mean the end of the organization.

SOC and the 4IR, in the workplace?

SOC and the 4IR, in the workplace?



Thank you