



Is there Structure in the Chaos of Resilience? The Crucial Role of Social Infrastructure as the Foundation of Organizational Resilience - A Theoretical Model

Starting point: a debate in the RHCS webinar 11/2023

In this webinar, I argued - based in part on Talcott Parsons' structural-functional theory - that structure is necessary for resilience.

Two questions emerge from the discussion in the webinar:

- 1) Is there structure (and order) in the chaos of resilience?
- 2) Are social theories that try to explain stability and social order (rather than chaos and dynamic developments) useful for resilience research?

For example: the old-fashioned structural-functional theory of Talcott Parsons.

Aim of my talk:

To discuss both questions from the perspective of an organisational and medical sociologist.

The idea of structural core:

Ecological resilience is maintained by keystone structuring processes (Gunderson 2000)

“Ecological resilience is maintained by **keystone structuring processes** across a number of scales, sources of renewal and reformation, and functional biodiversity” (Gunderson 2000: 42)

Gunderson, L. H. (2000). Ecological Resilience—In Theory and Application. Annual review of ecology and systematics, 31(1), 425–439. <https://doi.org/10.1146/annurev.ecolsys.31.1.425>

But what about social resilience?

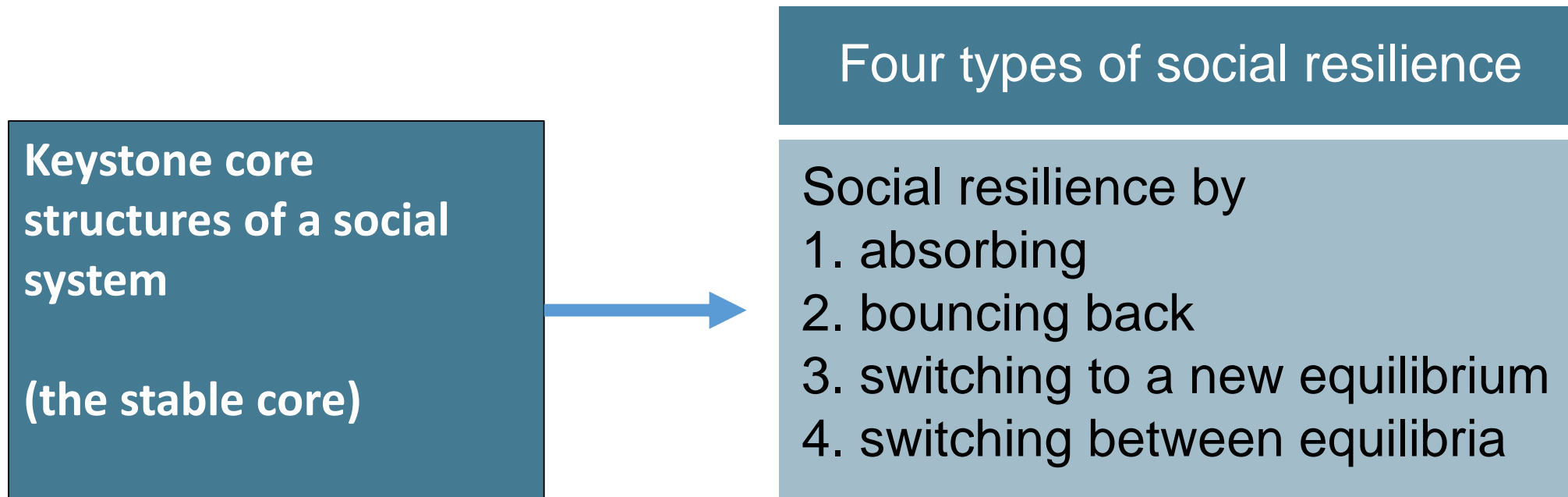
Is there structure in social resilience?

- Social systems differ from biological and ecological systems
- Social resilience differs from ecological resilience
- Healthcare organizations as an example

Healthcare organizations (HCO)...

- are, at least, a collective of healthcare professionals, administrators and technical staff interacting with one another to pursue common goals (e.g. triple aim)
- are, at best, social systems which are able to act effectively as corporate actors in a self-organized way (autopoietic system)
- => *resilience in HCO is based on **collective action***

Resilience-related collective action is enabled by the structural core of collectives and social systems



Pfaff, H., 2022, 'The Social Infrastructure of Organizational Resilience, Agency Capacity and Resilience Spirals: Starting Points for Resilient Leadership', in M. Franco (ed.), Leadership - New Insights, IntechOpen, London. 10.5772/intechopen.101786.

What is the structural core of social systems?

- One of the possible answers in sociology stems from the structural-functional theory of Talcott Parsons
- This theory states that a social system has to fulfill four functions – the AGIL-functions – in order to flourish and survive (Parsons & Smelser 1956)

Function 1: Adaptation (A)

Function 2: Goal attainment (G)

Function 3: Integration (I)

Function 4: Latent pattern maintenance (L)

Parsons, T. & Smelser, N. J. (1956). Economy and society: A study in integrations of economic and social theory. Routledge.

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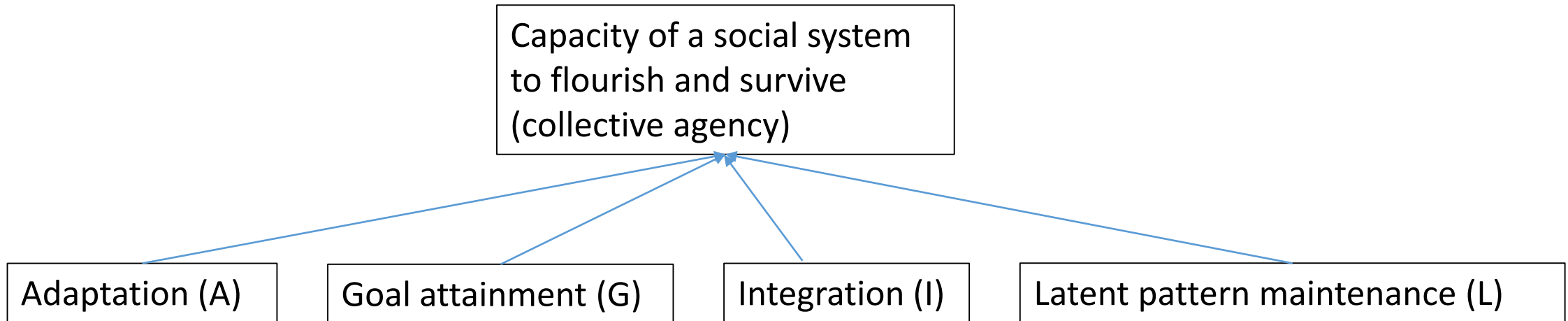
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Hypothesis:

The fulfillment of the AGIL functions leads to collective agency capacity and – in the end – to systemic agency capacity



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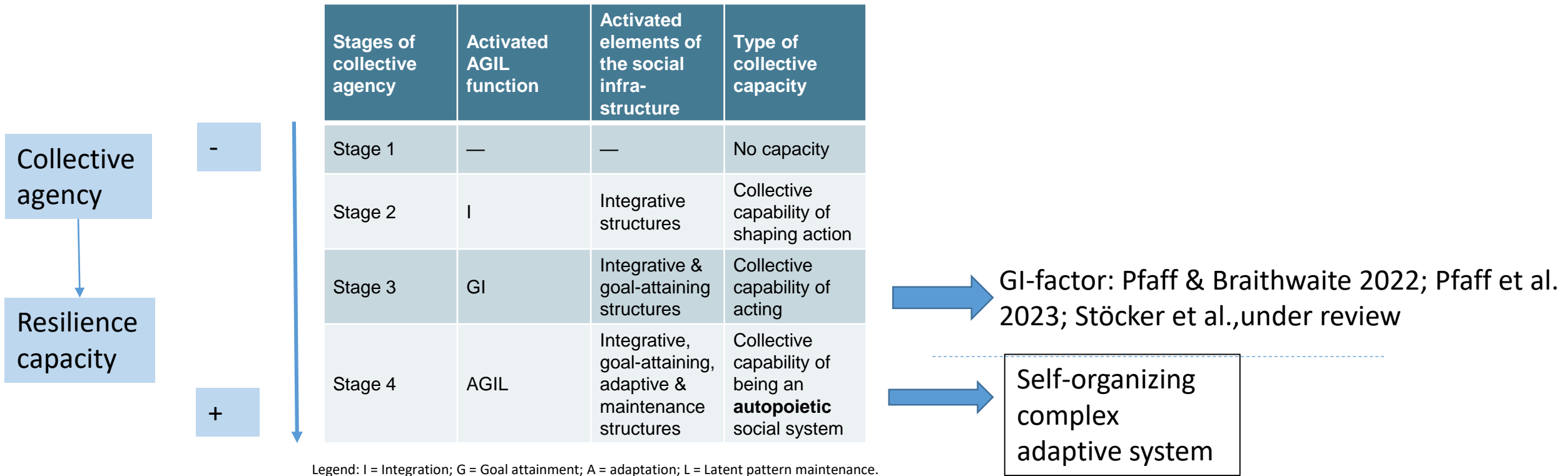
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Hypothesis:

The more AGIL-functions are fulfilled, the higher is

- a) the capacity of a collective system to act in a self-organized way &
- b) the resilience capacity of healthcare organizations

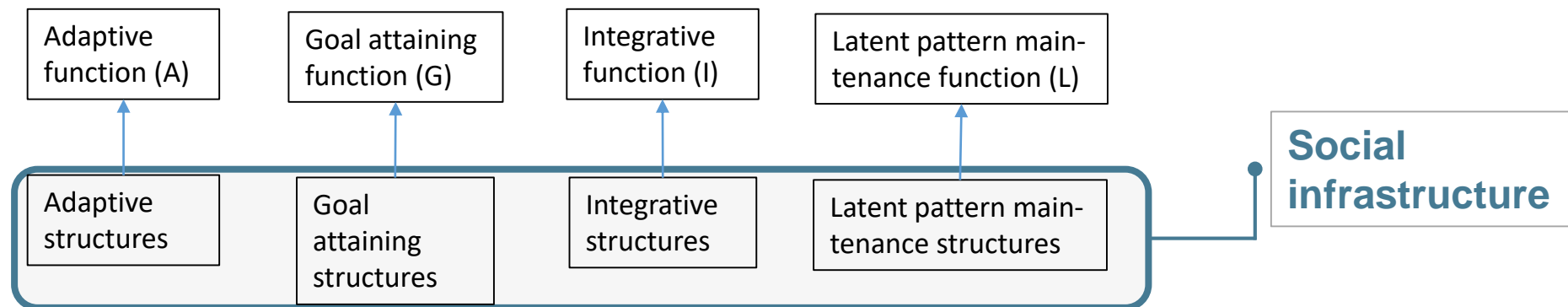


Pfaff, H. & Braithwaite, J. (2020). A Parsonian Approach to Patient Safety: Transformational Leadership and Social Capital as Preconditions for Clinical Risk Management—the GI Factor. *International Journal of Environmental Research and Public Health*, 17(11), 3989. <https://doi.org/10.3390/ijerph17113989>

Pfaff, H., Hammer, A., Ballester, M., Schubin, K., Swora, M. & Sunol, R. (2021). Social determinants of the impact of hospital management boards on quality management: a study of 109 European hospitals using a parsonian approach. *BMC Health Services Research*, 21(1), 70. <https://doi.org/10.1186/s12913-020-06053-0>

The social core consists of the structures which guarantee the fulfillment of four AGIL functions

These four function-fulfilling structures together build the social infrastructure of the social system



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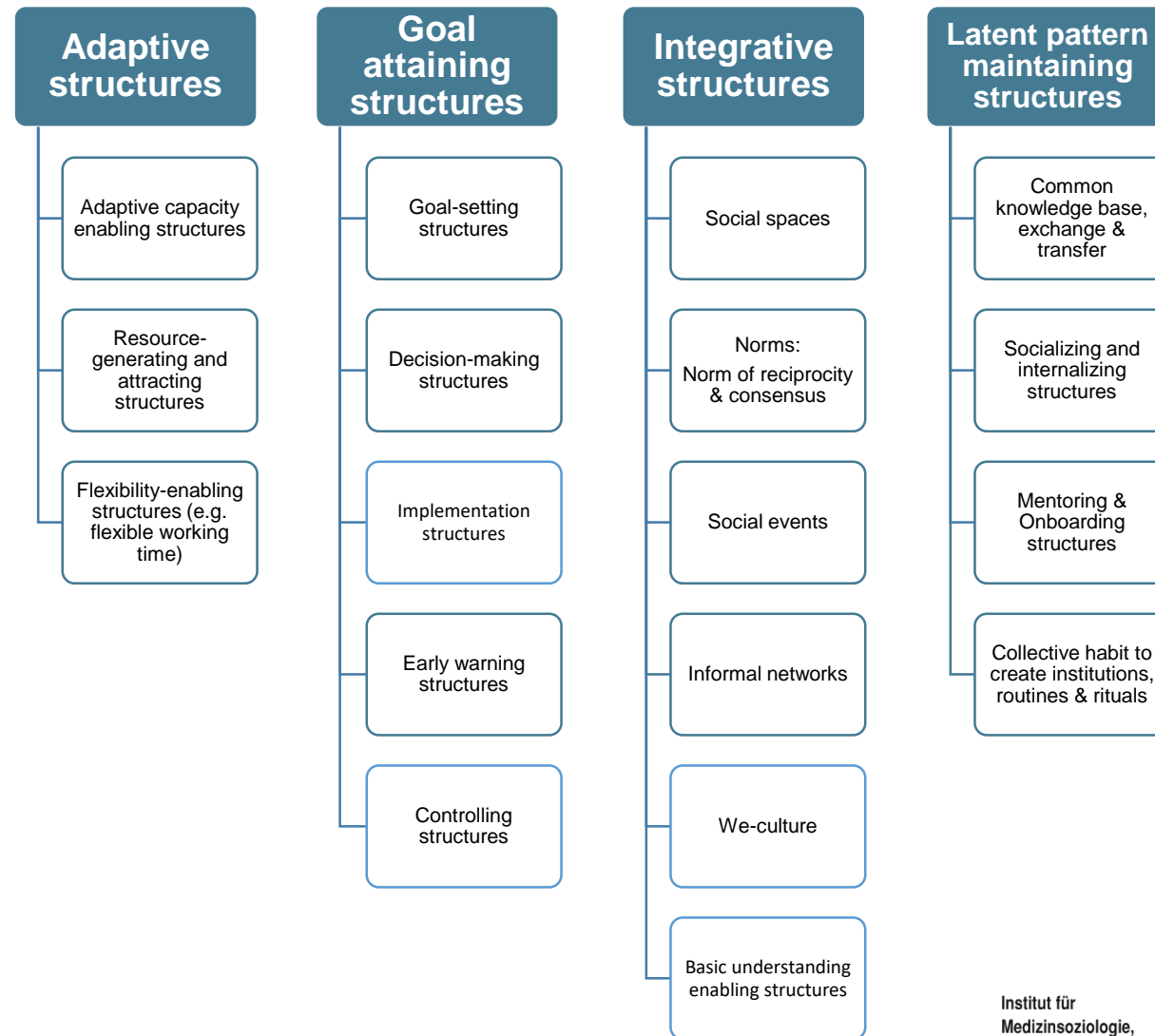
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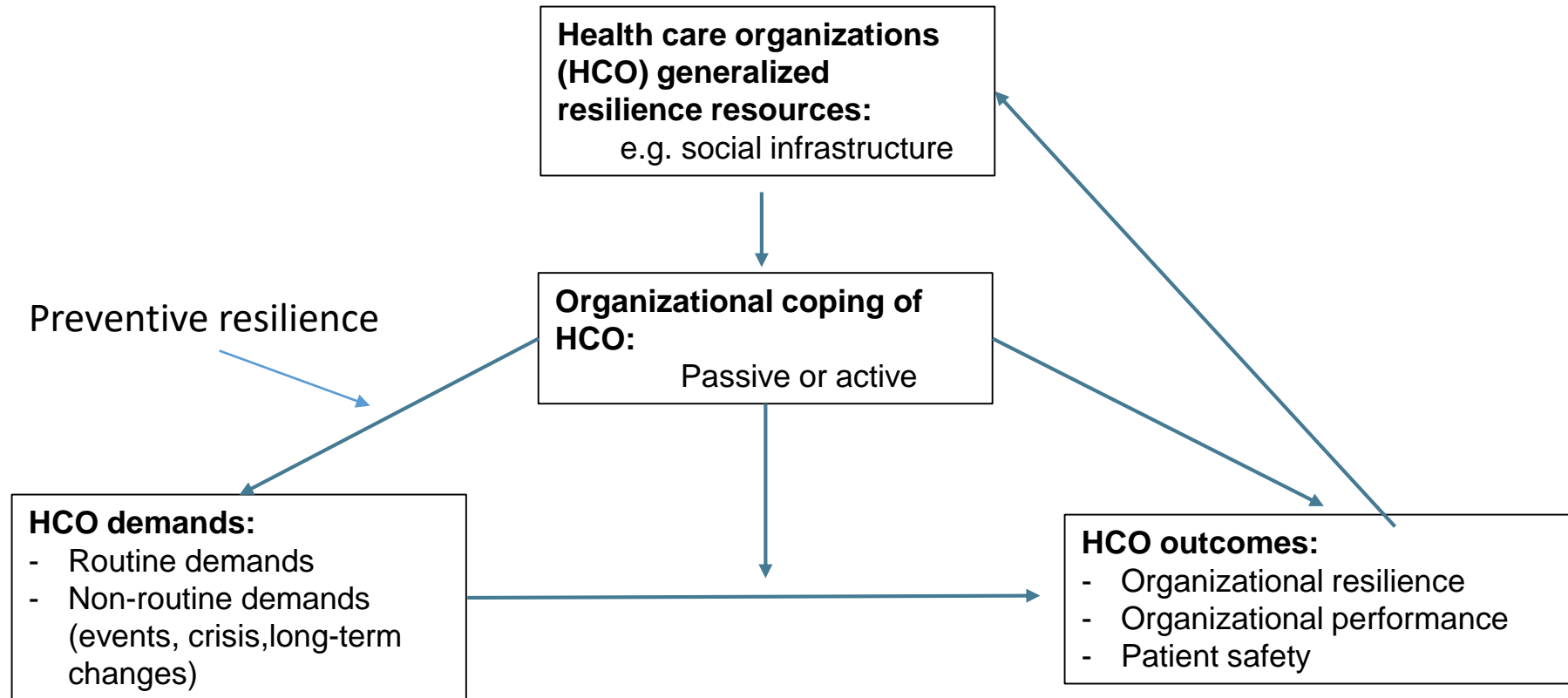


Structural elements of the social infrastructure



Social infrastructure = generalized resilience resources

Generalized resilience resources enable active and passive coping with routine demands and non-routine demands



Adapted from Pfaff, Holger (2004): Strategische Krankenhausführung mit Kennzahlen über Kunden und Mitarbeiter: Rahmenkonzepte, Instrumente und Verfahren. In: Holger Pfaff, Jürgen Lüticke, Bernhard Badura, Claus Piekarski und Peter Richter (Hg.): "Weiche Kennzahlen für das strategische Krankenhausmanagement: Stakeholderinteressen zielgerichtet erkennen und einbeziehen. Bern: Huber, S. 11–27

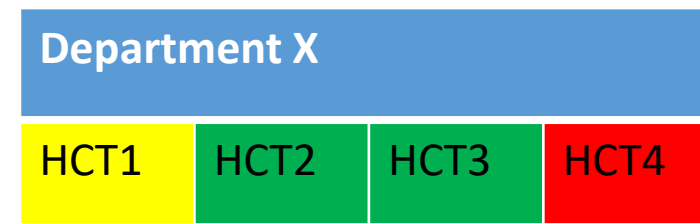
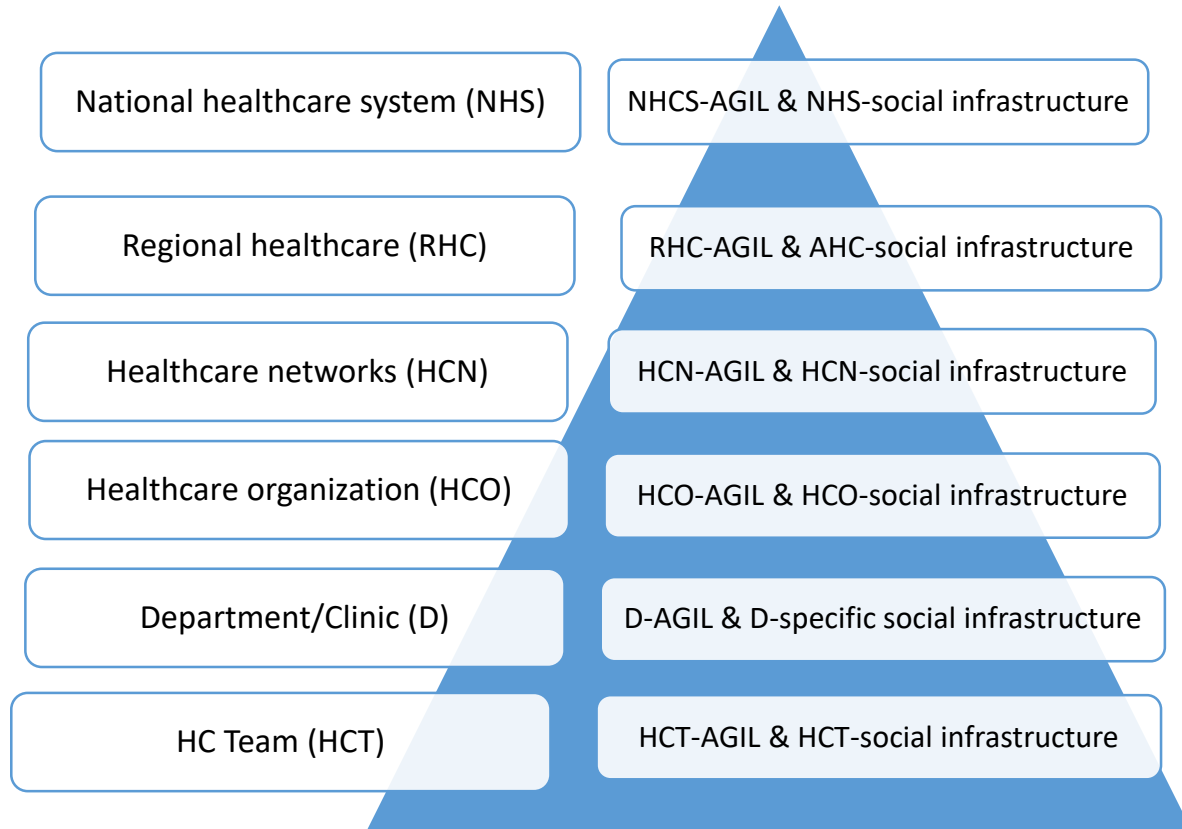
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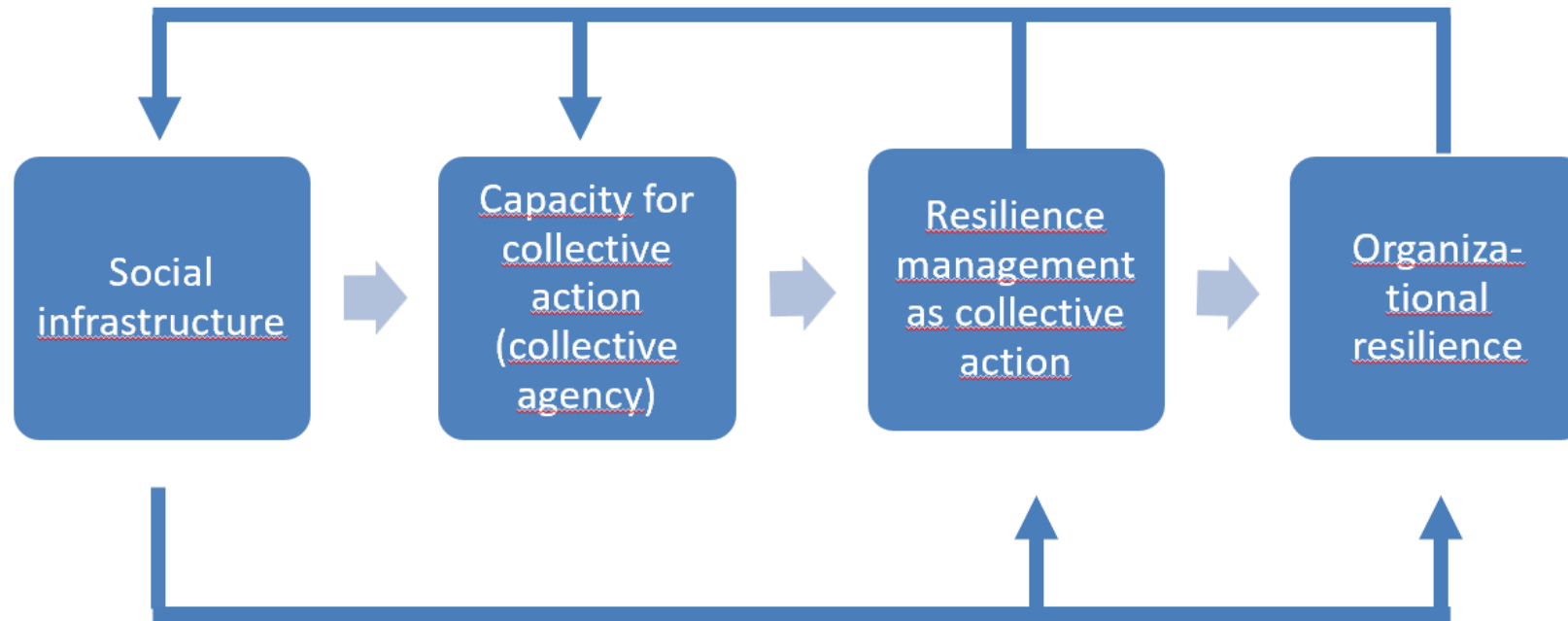
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Every social subsystem has to fulfill the four AGIL-functions and has its own social infrastructure




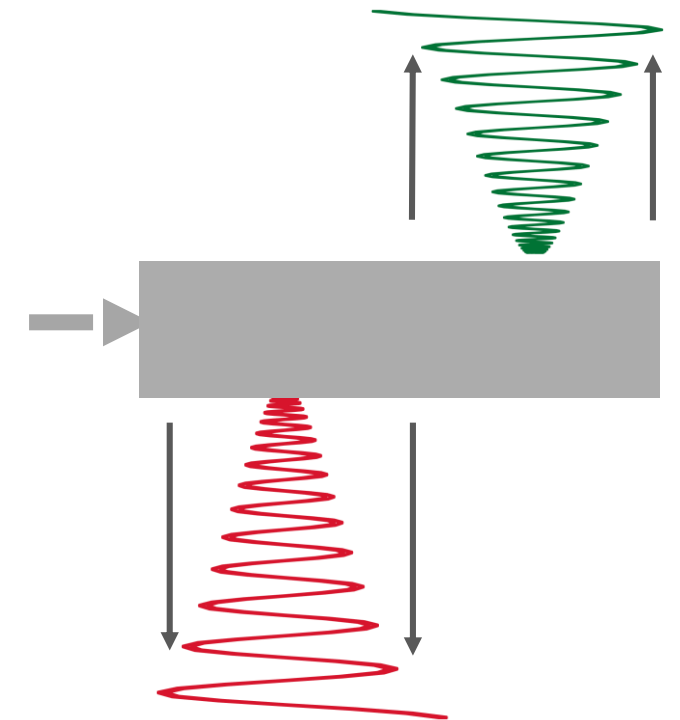
The social infrastructure model of organizational resilience



Pfaff, H. (2022). The social infrastructure of organizational resilience, agency capacity and resilience spirals: starting points for resilient leadership. In M. Franco (Hrsg.), *Leadership - New Insights*. IntechOpen. <https://doi.org/10.5772/intechopen.101786>

Levels of organizational resilience in health care and resilience spirals

 <p>high</p> <p>Resilience capacity of HCO</p> <p>low</p>	Level 4	The organized collective is able to act, to fulfil all the necessary routine work and to cope with change caused by innovations and expected and unexpected events (change level)
	Level 3	The organized collective is able to act and to fulfil all the necessary routine work without help (routine level)
	Level 2	The organized collective is not fully able to act autonomously and needs external help from outside (pathology level)
	Level 1	The organized collective is not surviving anymore (non-surviving level)



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Conclusions

Two answers to the original questions:

- 1) Yes, there is some structure (and order) in the chaos of resilience.
- 2) Yes, social theories that try to explain stability and social order are useful in resilience research, especially Talcott Parsons' structural-functional theory, but in a limited way.

They tend to explain the phenomena of stability and resilience potentials rather than concrete organisational coping activities and the content of resilience management.

Thanks for your attention.



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Empirical results about parts of this model

GI factor:

- Pfaff, H. & Braithwaite, J. (2020). A Parsonian Approach to Patient Safety: Transformational Leadership and Social Capital as Preconditions for Clinical Risk Management-the GI Factor. *International Journal of Environmental Research and Public Health*, 17(11), 3989. <https://doi.org/10.3390/ijerph17113989>
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AGIL factor:

- Pfaff, H., Pförtner, T.-K., Banaszak-Holl, J., Hu, Y. & Hower, K. (2022). Is the Systemic Agency Capacity of Long-Term Care Organizations Enabling Person-Centered Care during the COVID-19 Pandemic? A Repeated Cross-Sectional Study of Organizational Resilience. *International Journal of Environmental Research and Public Health*, 19(9). <https://doi.org/10.3390/ijerph19095045>

The concept:

- Pfaff, H. (2022). The social infrastructure of organizational resilience, agency capacity and resilience spirals: starting points for resilient leadership. In M. Franco (Hrsg.), *Leadership - New Insights*. IntechOpen. <https://doi.org/10.5772/intechopen.101786>