

Resilience among older adults: The value of different resilience approaches





Contents

- Introduction resilience
- Dynamical systems approach
 - Examples
- A-priori approach
 - Examples
- Summary



Resilience: doing well despite adversity



Pixabay



Dynamical systems approach



Pixabay



Dynamical systems approach

“An individual’s ability to resist functional decline or recover physical health following a stressor.”

Gijzel et al. 2018
Whitson et al. 2016



Dynamical systems approach: complex systems



Universal Patterns

Resilience



Validation

Dynamical Indicators of Resilience (DIORs)

Gijzel et al. 2018

Examples



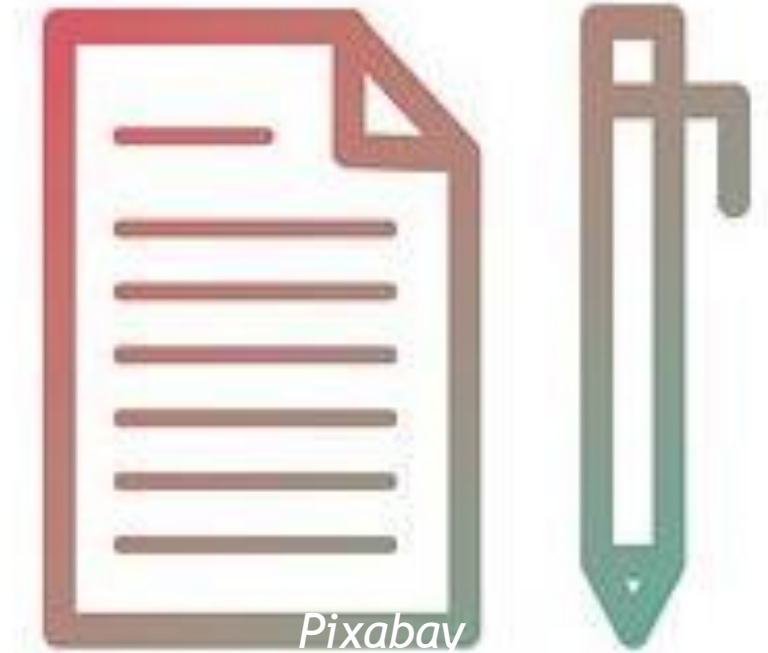
Gijzel et al. 2017

Physical

Mental

Social

100x: Health?



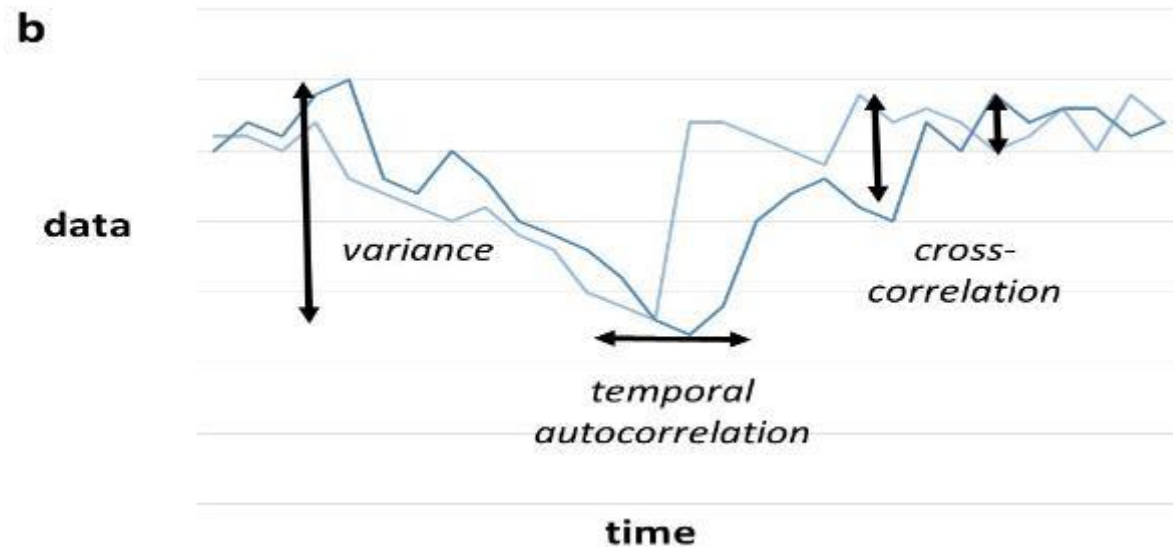
Dynamical Indicators of Resilience (DIORs)

Universal patterns

Low variance

Low temporal autocorrelation

Low cross correlation



See original graph in Gijzel et al. 2017

Example



Gijzel et al. 2018



Future applications:
-wearables
-ecological
momentary
assessment



A-priori approach





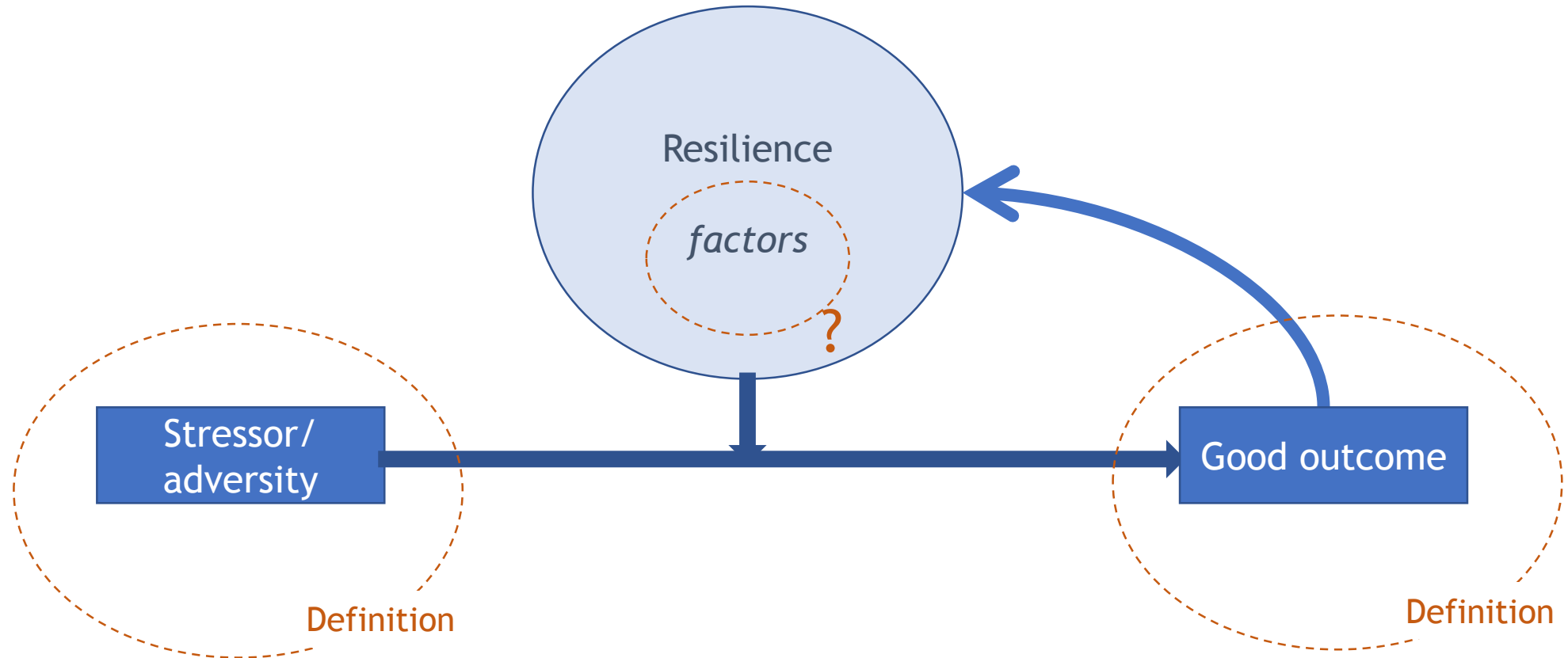
A-priori approach

“Resilience is defined as the process of effectively negotiating, adapting to, or managing significant sources of stress or trauma. Assets and resources within the individual, their life and environment facilitate this capacity for adaptation and ‘bouncing back’ in the face of adversity. Across the life course, the experience of resilience will vary”

Windle 2011



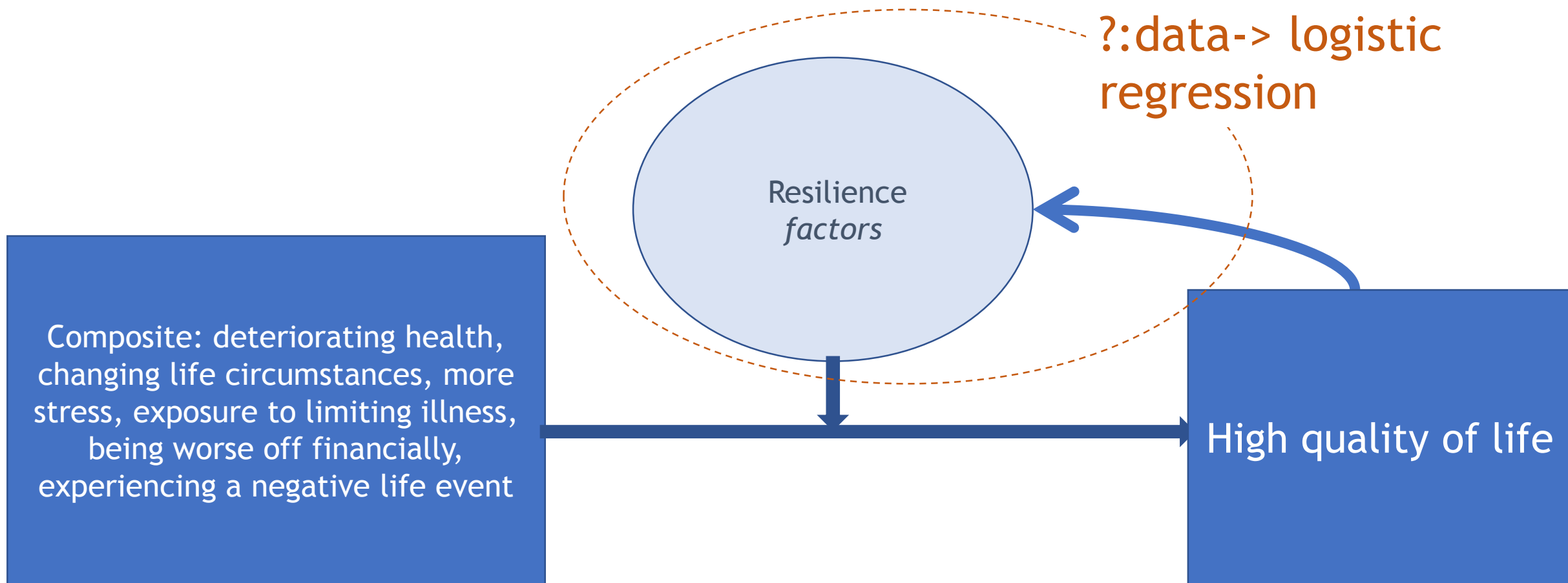
A-priori approach



Example: quantitative



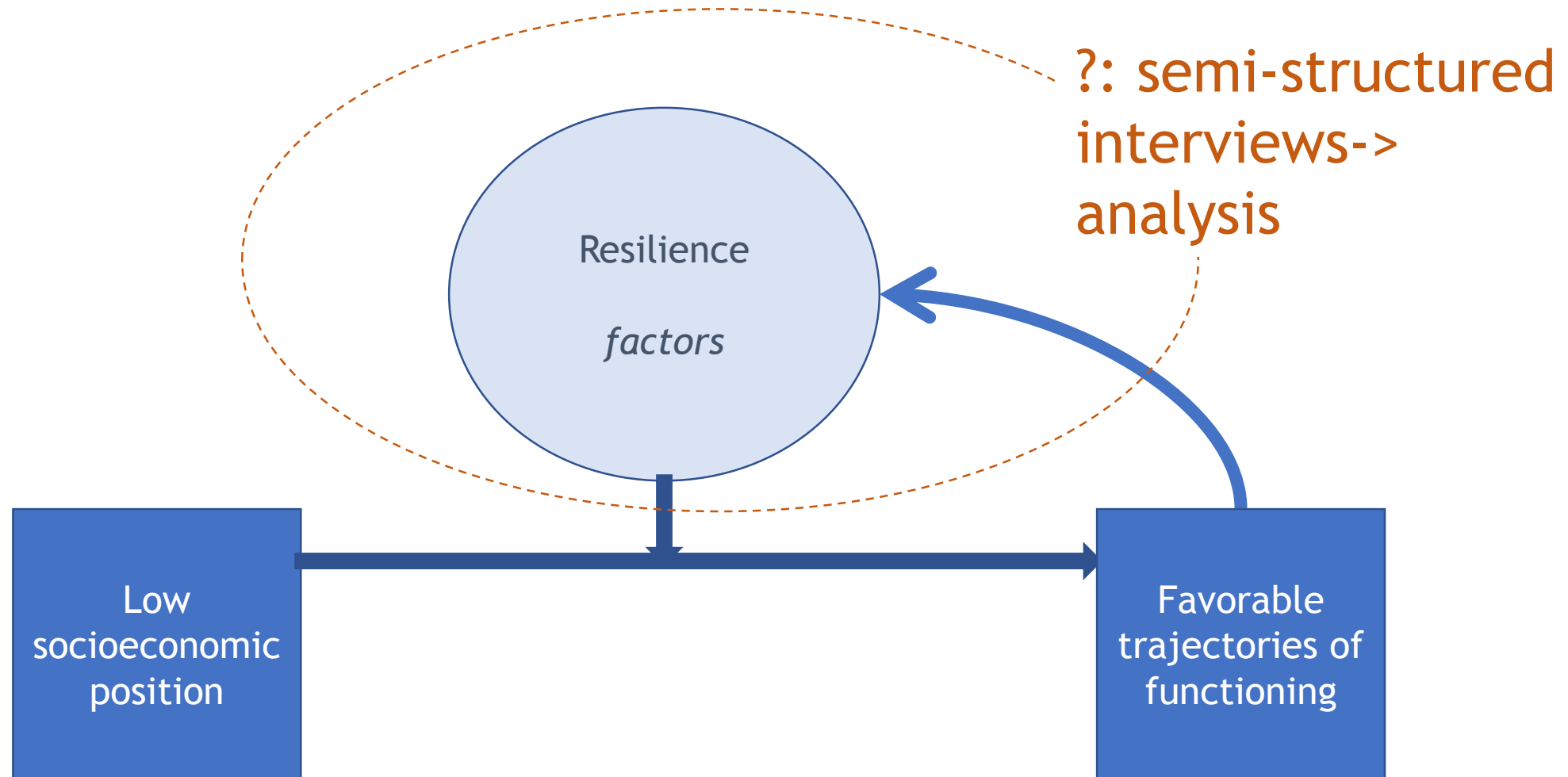
Hildon et al. 2009



Example: qualitative



Kok et al. 2018





Factors

- Coping strategies
- Positive emotions/optimism
- Having a life goal/ caring for others/generativity
- Spirituality
- (Self-rated) health
- Physical activity
- Social support

*Kessel 2013,
Macleod 2016*



Resilience

- Two approaches
 - Dynamical systems approach
 - Based on times series of functioning
 - Adversity not defined: naturally (constantly) occurring perturbations
 - Outcome: DIORs
 - A-priori
 - Based on definitions of:
 - Adversity
 - Good outcome
- Focus group: value approaches for research/ practice



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