

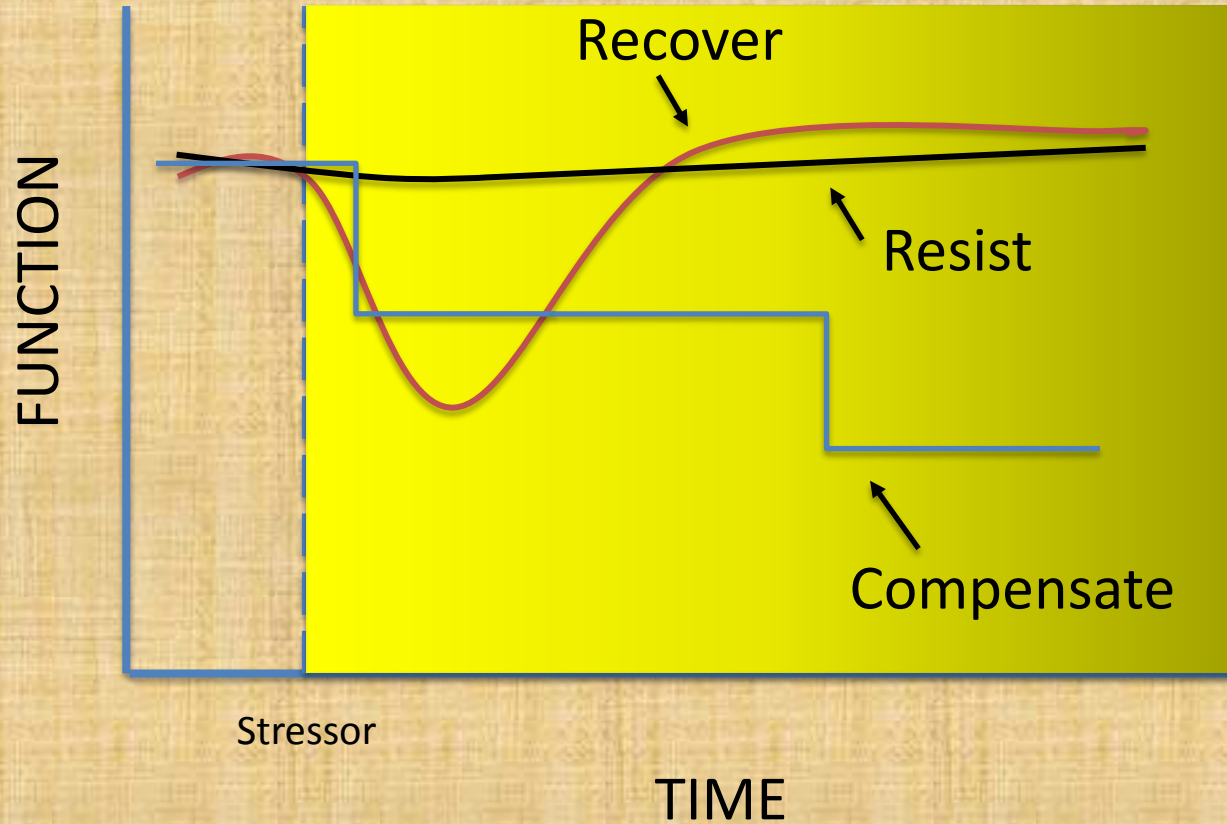
Modeling Resilience in Late Life in WHI

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Resilience:

- *"The capacity of an organism to **resist** and **respond** to a challenge" (LeBrasseur, 2017)*
- *"Physical resilience...ability to **resist** or **recover** from functional decline following a health stressor such as infection, surgery, fracture, bed rest or chemotherapy" (Whitson, 2016)*
- *"Opposite of vulnerability" (Franco, 2009)*

Resilience Trajectories



Generic Model of Resilience

Stressors/Exposures:

Genotypes
Disease states
Pathologies
Insults, injuries
Procedures, treatments
Social conditions
Economic conditions



Outcomes:

Cognitive function
Physical function
Social function
Behavioral function
Role function
Absence of health event
Absence of impairment

Mediators/Moderators:

Social
Economic
Physical
Biological, Medical
Psychological
Behavioral

Examples of Stressors/Exposures Available in WHI

- APOE-4 genotype (Hayden, Resnick)
- Other genotypes
- Alzheimer's Disease-Pattern Similarity score (Casanova)
- CVD/stroke/MI
- Fractures
- Depression
- Lower SES/education
- Cancer (chemo, radiation)
- Higher multi-morbidity
- Higher frailty (sWHI Frailty Index)
- Obesity
- Diabetes
- Trauma

Q & A