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Areas of Investigation with Respect to Reserve and Resilience

Populations	Population samples	Hospitalized older adults
Methods	Observational epidemiology	Natural experiments
Summary	I use epidemiologic methods to identify life experience factors that <i>modify trajectories</i> of cognitive aging	Identify factors that modify cognitive outcomes associated with <i>noxious exposures</i> (hospitalization, surgery)
	I am particularly interested in <i>measurement</i> issues and <i>construct validity</i>	

Reserve in research

- **Reserve** → An *organizing or conceptual framework* for looking for individual difference factors, including life experiences, that influence cognitive outcomes
 - *May not be a single “thing in the head”*
 - *I do not believe that distinguishing between cognitive and brain reserve is particularly helpful because it must all be brain-based*

The Cognitive Reserve Model in the Development of Delirium: The Successful Aging After Elective Surgery Study

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As long as the inflammatory response is not overwhelming, persons with higher estimated verbal intelligence face less risk of post-operative delirium

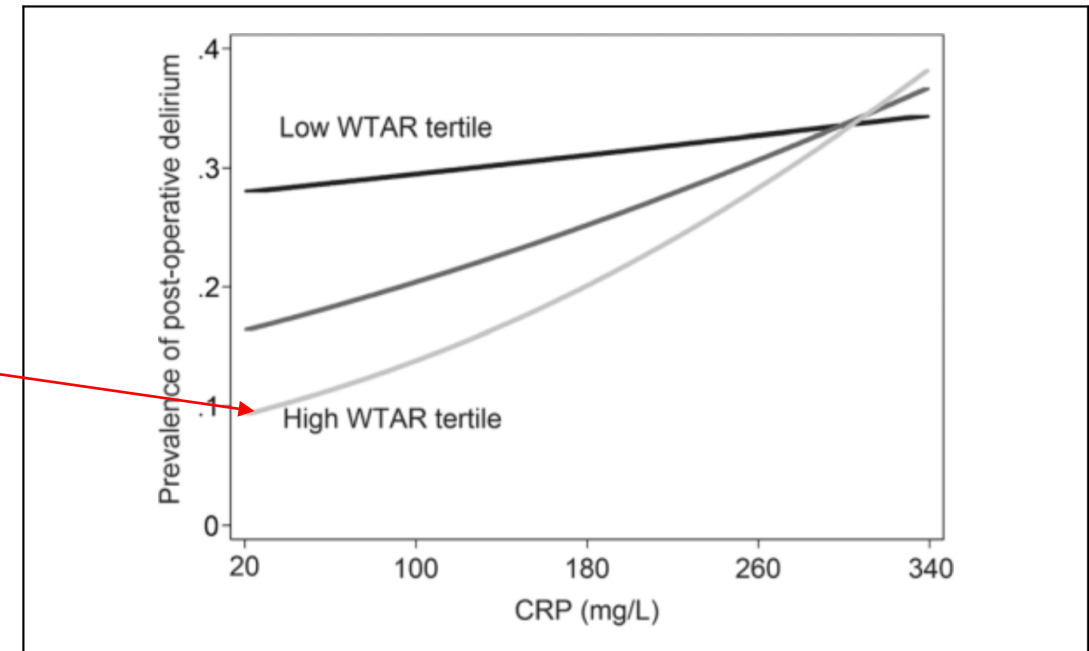
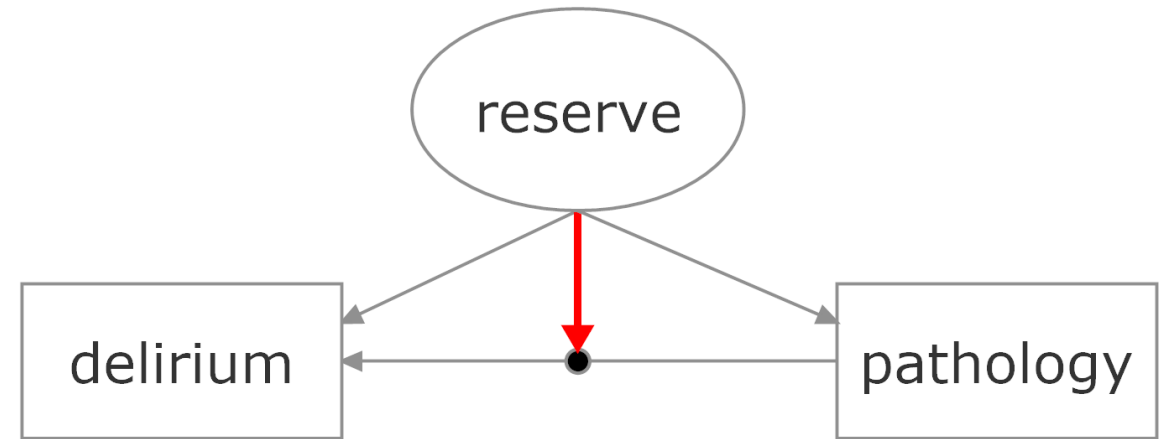


Figure 3. Effect modification of C-reactive protein (CRP) by preoperative vocabulary ability. This figure summarizes fitted estimates