

Reference List for Concepts and Measures of Resilience

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This contains a bibliography of all research cited in my presentation, as well as some additional articles that might be useful.

Definitions of Resilience - Concept

Several papers provide excellent descriptions of the concept of resilience. The most informative were four comprehensive reviews of the concept of resilience in older adults,¹⁻⁵ reviews relevant to adults of all ages,^{6,7} and a historical review of the construct.⁸ Several less comprehensive papers also provided insights. These include one based on an NIA workshop on measures of physiologic resiliencies in older adults,^{9,10} a focus on eudaimonics,¹¹ and one on resilience and healthy aging.¹² Other definitions from the slides include Smith,¹³ Klohnen,¹⁴ Martin,¹⁵ Windle,¹ and Masten.¹⁶ Definitions focusing on patterns of change in health included Ryff,⁷ Dyer,¹⁷ Carver,¹⁸ and Zautra.¹⁹ In addition, Deshields and Bonanno describe how resilience is defined as a temporal pattern of change.^{20,21} Types of resilience are described by several investigators.^{4,9,10,22}

Measures of Resilience

Systematic reviews of measures of resilience include one in adults of all ages²³ and one of measures for older adults.²⁴ In addition, the Stress Measurement Network reviewed measures for adults (<https://stresscenter.ucsf.edu/measures/trait-resilience>). The recommended and most commonly used measures in older adults include the Resilience Scale²⁵⁻²⁷ including tests in other studies;²⁸ the Connor-Davidson Resilience Scale^{29,30} including studies of shorter versions³¹ and applications in other studies;³² the Brief Resilience Scale,¹³ the Resilience Scale for Adults,³³ the Brief Resilient Coping Scale;³⁴ and the Multidimensional Individual and Interpersonal Resilience Measure for Older Adults (MIIRM).¹⁵

Overall Conceptual Framework of Resilience

There are very few conceptual frameworks of the entire process of resilience. The best was developed for adults with cancer and was the basis for my draft framework.²⁰ Two others include the Reserve Capacity Model developed for Latinos/Hispanics^{35,36} and an example of a framework by Windle.¹²

Qualitative Research on Resilience in Minority Groups

There were only a few qualitative studies in minority groups. These have been done in Black men,³⁷ older African Americans,^{38,39} and Native American elders.^{40,41} There were other qualitative studies not mentioned in my presentation that reflect creative and innovative methods.^{42,43} There are two good qualitative papers on resilience in the oldest-old.^{44,45}

Examples of Measures of Resilience in Secondary Datasets

Given that resilience measures may not be labeled as such, it is important to look to summaries of measures of related constructs. A summary of psychosocial and lifestyle measures in the Health and Retirement Study (HRS) from 2006-2016 is provided in a 2017 report.⁴⁶ A paper describes the HRS as a resource to investigators in stress and aging, including a review of publications examining the link between stress and health.⁴⁷

In the HRS, an interesting approach was taken that could be a model for others attempting to use secondary data not designed to study resilience. The authors created a measure derived from HRS

items to parallel Wagnild and colleagues' Resilience Scale. They conducted extensive psychometric analyses of their new measure and it appeared to perform well in their study.⁴⁸ I am aware of at least two specific measures of trait resilience included in MIDUS; these are the Positive Reappraisals Scale⁴⁹ and the Ego Resilience Scale.⁵⁰ In the Notre Dame Longitudinal Study of Aging, the Dispositional Resilience Scale by Bartone,⁵¹ a measure that also was reviewed by Windle.²³

Studies of Resilience in Secondary Datasets - Examples

Three examples of analyses of the protective nature of various trait resilience characteristics presented in my talk included Manning,⁵² Brown,⁵³ and Losada.⁵⁴

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