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#### Summary and key findings

- Resilience in older age is the ability to stand up to adversity and to 'bounce back' or return to a state of equilibrium following adverse episodes
- There is no universally agreed definition or measure of resilience and, partly as a result, there are variations in the measured prevalence of resilience and variations in the factors found to be associated with resilience
- Resilience does not decline with age and older adults are at least as resilient as younger adults
- Better health and well-being is associated with greater resilience
- Higher levels of social and communal interaction are associated with improved resilience
- Increased levels of spirituality may be associated with improved resilience
- Interventions to promote resilience have to address the factors associated with resilience, for example
  - o promoting better diet and exercise or easier access to a GP to improve overall health and well-being
  - o travel concessions, flexible retirement or encouraging volunteering to promote greater social interaction

#### Defining resilience / What is resilience?

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Resilience in older age is the ability to stand up to adversity and to 'bounce back' or return to a state of equilibrium following individual adverse episodes.

For continuing adversity it may be a matter of having the ability, or learning how, to cope with or manage that adversity in the longer term.

Health related mental resilience is different from physical resilience or financial resilience.

The psychological concept of resilience has its roots in child and developmental psychology and may sometimes be seen as a process rather than a personal characteristic or trait of character.

By viewing resilience as a 'dynamic process encompassing positive adaptation within the context of significant adversity', the focus of study then moves away from identifying some of the key factors associated with resilience, to understanding the mechanisms by which they might operate. <sup>1</sup>

Resilience may be a latent characteristic in some individuals but will only manifest itself when they experience adversity. For older people that adversity may have been lifelong, in the case for example of a disability, may be a single life event for example the bereavement of a close friend, spouse or other family member or may be a long term adversity experienced in later life for example the development of a chronic illness.

The concept of resilience is closely related to the ideas of the origins of health - salutogenesis , outlined by Aaron Antonovsky in his 1979 book, *Health, Stress and Coping*. According to salutogenic theory, stressors will cause harm if they violate an individual's 'sense of coherence'. That sense of coherence is made up of three components: (1) *Comprehensibility*: a belief that things happen in an orderly and predictable fashion and a sense that you can understand events in your life and reasonably predict what will happen in the future (2) *Manageability*: a belief that you have the skills or ability, the support, the help, or the resources necessary to take care of things, and that things are manageable and within your control; and (3) *Meaningfulness*: a belief that things in life are interesting and a source of satisfaction, that things are really worthwhile and that there is good reason or purpose to care about what happens.

Windle <sup>1</sup> argues that there is more to resilience than the salutogenic concept of 'sense of coherence' although 'sense of coherence' may be one aspect of the process leading to resilient outcomes. She also distinguishes resilience from 'hardiness', primarily because hardiness is a stable personality trait whereas

<sup>&</sup>lt;sup>1</sup> Windle G (2010), What is resilience? A review and concept analysis

resilience is dynamic and will change across the lifespan, and from 'ego-resiliency', a pre-disposition to resist anxiety and engage positively with the world, which does not depend on adversity.

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#### Measuring resilience

There is no universally agreed definition or measure of resilience and, partly as a result, there are wide variations in the measured prevalence of resilience and variations in the findings on factors that are associated with resilience.

A 2008 study from the English Longitudinal Study on Ageing (ELSA)<sup>2</sup> equated resilience with a lack of depression or non-worsening of depression. Another 2008 study<sup>3</sup> equated resilience with maintaining a good quality of life, while a 2005 study<sup>4</sup> equated resilience with lower risk of mortality and a 2012 study<sup>5</sup> equated it to perceived health.

Windle, Bennett and Noyes<sup>6</sup>, in a 2011 review of resilience measurement scales, looked at 19 different scales and sub-scales for measuring resilience but even that list was not exhaustive and excluded, for example, the Hardy-Gill scale for measuring physical resilience.

Among the leading scales in use with adults are the Resilience Scale (RS), a scale with 25 items and 2 dimensions developed by Wagnild and Young in 1993; the Connor-Davidson Resilience Scale (CD-RISC), a 25 item 5 dimensional scale developed by Connor and Davidson in 2003; and Psychological Resilience, a scale with 3 dimensions and 19 items developed by Windle, Markland and Woods in 2008 for use with older adults.<sup>7</sup>

In their 2011 review of resilience measurement scales <sup>6</sup>, Windle, Bennett and Noyes conclude that there is no 'gold standard'.

<sup>&</sup>lt;sup>2</sup> Demakakos et al (2008), Resilience in older age: a depression-related approach

<sup>&</sup>lt;sup>3</sup> Hildon et al (2008), Understanding adversity and resilience at older ages

<sup>&</sup>lt;sup>4</sup> Walter-Ginsburg et al (2005), A gender-based dynamic multidimensional longitudinal analysis of resilience and mortality in the old-old in Israel

<sup>&</sup>lt;sup>5</sup> Gallacher et al (2012), Resilience to health related adversity in older people

<sup>&</sup>lt;sup>6</sup> Windle, Bennett and Noyes (2011), A methodological review of resilience measurement scales.

<sup>&</sup>lt;sup>7</sup> Windle, Markland and Woods (2008), Examination of a theoretical model of psychological resilience in older age

#### Factors associated with resilience

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For resilience to be achieved, protective factors, variously called assets, resources or strengths, come into play. These may be at the individual, social or community and societal level.<sup>1</sup>

#### Age

A number of studies have shown that resilience does not decline with age and, when other factors have been taken into account, older adults are at least as resilient as younger adults.<sup>2,8,9</sup>

#### Gender

Variable results have been found linking resilience to gender. Some studies<sup>2,10,11</sup> have found men to be the more resilient sex in older age while at least one study<sup>12</sup>, found women to be more resilient.

Health and well-being – mental and physical health and perceived health

The level of resilience in older age may be associated with the level of overall health and well-being with those with a greater feeling of health and well-being being better able to cope with adversity. There is however an apparently contradictory finding that higher levels of mental illness in general are associated with greater resilience. Although higher levels of depression may be associated with lower resilience. Although higher levels of depression may be associated with lower resilience.

<sup>&</sup>lt;sup>8</sup> Gooding et al (2012), Psychological resilience in young and older adults

<sup>9</sup> Nygren et al (2005), Resilience, sense of coherence, purpose in life and self-transcendence in relation to perceived physical and mental health among the oldest old

<sup>&</sup>lt;sup>10</sup> Hardy et al (2004), Resilience of community-dwelling older persons

<sup>&</sup>lt;sup>11</sup> Seidel et al (2009), Recovery in instrumental activities of daily living (IADLs): findings from the Medical Research Council Cognitive Function and Ageing Study (MRC CFAS)

<sup>12</sup> Netuveli et al (2008), Mental health and resilience at older ages: bouncing back after adversity in the British Household Panel Survey

<sup>&</sup>lt;sup>13</sup> Gallacher et al (2012), Resilience to health related adversity in older people

<sup>&</sup>lt;sup>14</sup> De Paula Couto et al (2011), Stressful Life Events and Psychological Well-being in a Brazilian Sample of Older Persons: The Role of Resilience

<sup>&</sup>lt;sup>15</sup> Gooding et al (2012), Psychological resilience in young and older adults



#### Relationships and social networks

A number of studies link resilience in older age to the availability of social networks, social support and integration and connectedness within the community. Greater social connectedness is associated with improved resilience. 10,12,16,17,26,27,29,30

The existence of close family networks may aid the resilience of older family members 18, 28, 30 and this may sometimes be termed 'family resilience'.

Personal characteristics and positive emotions

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When all external factors have been taken into account, some older people may be inherently more resilient than others. Having a resilient personality has been shown to moderate the impact of ill-health on subjective well-being<sup>19</sup>.

Inherent resilience or 'hardiness' has been shown to be associated with life satisfaction 17,19,20,31, self-esteem and positive emotions 21

A 2008 study of resilience among older women living in the community<sup>22</sup>, found that the strongest predictors of CD-RISC score were higher emotional well-being, self-rated successful ageing, social engagement and fewer cognitive complaints.

### Spirituality

It might be conjectured that a strong sense of religion and spirituality could add to resilience in older age. For example, writing in the context of the USA, Faigin and Pargament<sup>23</sup> argue that the importance of religion increases with age and religion may serve as a source of grounding in the face of adversity. They cite a study of 338 elderly patients admitted to the hospital, who when asked an open-ended question regarding their coping resources, over 40%

<sup>&</sup>lt;sup>16</sup> Hildon et al (2010), Examining Resilience of Quality of Life in the Face of Health-Related and Psychosocial Adversity at Older Ages: What is "Right" About the Way We Age?

<sup>&</sup>lt;sup>17</sup> Bennett (2010), How to achieve resilience as an older widower: turning points or gradual change?

<sup>&</sup>lt;sup>18</sup> Walsh (2012), Successful Aging and Family Resilience

<sup>&</sup>lt;sup>19</sup> Windle, Woods and Markland (2010), Living with Ill-Health in Older Age: The Role of a Resilient Personality

<sup>&</sup>lt;sup>20</sup> O'Rourke (2004), Psychological resilience and the well-being of widowed women

<sup>&</sup>lt;sup>21</sup> Ong et al (2006), Psychological resilience, positive emotions, and successful adaptation to stress in later life

<sup>&</sup>lt;sup>22</sup> Lamond et al (2008), Measurement and predictors of resilience among community-dwelling older women

<sup>&</sup>lt;sup>23</sup> Faigin and Pargament (2011), Strengthened by the Spirit: Religion, Spirituality, and Resilience through Adulthood and Aging



spontaneously cited religion. They examine qualitative research but provide no firm evidence of spirituality enhancing resilience and conclude there is a dearth of research on spiritual resiliency interventions with older adults. However a San Diego based study of 1,973 older women concluded that spirituality had a role in promoting resilience to stressors, particularly for those with lower income and education levels, <sup>22,24</sup> and this is confirmed by a number of smaller scale studies. <sup>25,26,27,28,29,32</sup>

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### Other factors

Other factors that have been associated with resilience in older age include early living conditions<sup>28</sup>, keeping active<sup>29</sup>, household income (one study<sup>30</sup> found lower household income is associated with greater resilience while a second study<sup>31</sup> found the reverse) and ethnicity<sup>32</sup>. There has however been no association found between resilience and whether an older person lives in a rural, suburban or urban environment.<sup>30</sup>

Another body of studies, which we will not cover in this review, looks at protein levels and other variations in the chemistry of the brain associated with resilience.

In studies specific to recovery rather than resilience, being able to recover the ability to carry out activities of daily living has been linked to being male, the level of self rated health, lower levels of medication and lower levels of co-morbidity<sup>33</sup>.

<sup>&</sup>lt;sup>24</sup> Vahia et al (2011), Correlates of spirituality in older women

<sup>&</sup>lt;sup>25</sup> Ramsey and Blieszner (2013), Spiritual resiliency and aging: hope, relationality, and the creative self

<sup>&</sup>lt;sup>26</sup> Kinsel (2005), Resilience as adaptation in older women

Pentz (2005), Resilience among older adults with cancer and the importance of social support and spirituality-faith "I don't have time to die"

<sup>&</sup>lt;sup>28</sup> Cheung and Kam (2012), Resiliency in older Hong Kong Chinese

<sup>&</sup>lt;sup>29</sup> Moyle et al (2010), Older people maintaining mental health well-being through resilience: an appreciative inquiry study in four countries

<sup>&</sup>lt;sup>30</sup> Wells (2010), Resilience in older adults living in rural, suburban, and urban areas

<sup>&</sup>lt;sup>31</sup> Beutel et al (2010), Life satisfaction, anxiety, depression and resilience across the life span of men

<sup>&</sup>lt;sup>32</sup> Krause (2003), Religious meaning and subjective well-being in late life

<sup>&</sup>lt;sup>33</sup> Seidel et al (2009), Recovery in instrumental activities of daily living (IADLs): findings from the Medical Research Council Cognitive Function and Ageing Study (MRC CFAS)

#### **Promoting resilience**

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Policy makers have increasingly come to recognise the potential of promoting resilience as a way of allowing older people to cope better with difficulties in later life but resilience is not something that can be bottled and distributed. Solutions to promote 'resilience' will not directly address resilience as such but the factors associated with resilience and not all of the factors associated with resilience lend themselves to the promotion process.

Improved resilience is associated with better health and well-being, so measures to bring about a general improvement in health and well-being for all older people will also improve resilience. Such measures will include the promotion of a healthy lifestyle including good diet and exercise and measures to improve those parts of the health service which particularly affect older people for example easier access to a GP.

Resilience is crucially associated with the level of inter-personal relationships and social interaction so measures to enhance inter-personal relationships and social interaction, such as bus passes and the London freedom pass, or the ability to work part time beyond state retirement age, will help to promote resilience.<sup>34</sup> For many activities in later life, such as life-long learning classes or communal exercise activity including Tai Chi or Yoga, it is not so much the activity itself which is important as the opportunity for social and communal interaction. In that respect, volunteering in later life and helping others is potentially beneficial not just for the recipient but also for the volunteer.

<sup>&</sup>lt;sup>34</sup> Blane et al (2011), Resilience at older ages: the importance of social relations and implications for policy



### **Review of the literature**

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Within each section, the reviewed literature is listed in reverse chronological order with the most recent publication first.



## a) Reviews, overviews and seminal texts

Study	Findings
Wild K, Wiles J L and Allen R E S (2013) Resilience: thoughts on the value of the concept for critical gerontology, <i>Ageing and Society</i> 33 (1): 137-158	Examines the history of the concept of resilience; explores some of the diverse ways that gerontologists are attempting to apply it to later life; and discusses the strengths and weaknesses of using resilience as a conceptual framework within critical ageing research. The authors also suggest ways of conceptualising resilience and ageing. They highlight the different scales of resilience that affect older people's ability to negotiate adversity, also some key areas of resilience relevant to later life. The example of mobility resilience is used to illustrate how different scales of resilience operate within an area of resilience central to the ageing experience.
Windle G (2012) The contribution of resilience to healthy ageing, Sage <i>Perspectives in Public Health</i> 132 (4): 159-160	This overview defines resilience as the process of negotiating, managing and adapting to 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.  Resilience is not necessarily about superior functioning or flourishing, it is about doing okay, or better than could be expected, given the individual circumstances.  In many instances the risk or adversity is not an isolated event that the person is able to actively change but a lifelong experience.  The Resilience and Healthy Ageing Network scoping review of resilience interventions found very few peer reviewed publications of interventions that promote resilience in relation to health outcomes (mental and physical), especially in relation to older people.



Allen R S, Haley P P, Harris G M, Fowler S N and Pruthi R (2011) Resilience: Definitions,
Ambiguities, and Applications In: Resnick B,
Gwyther L P P and Roberto K A A (eds) Resilience in Aging: Concepts, Research, and Outcomes,
Springer

Resilience has been defined as a dynamic process of maintaining positive adaptation and effective coping strategies in the face of adversity. Although most scholars and members of the general public have an intuitive understanding of resilience, ambiguities in definition, measurement, and application contribute to scientific criticism regarding the usefulness of resilience as a theoretical construct Focuses on the definition, ambiguity, and application of the construct of resilience across the adult lifespan as it relates to successful aging.

Resnick B, Gwyther L P P and Roberto K A A (eds) (2011) *Resilience in Aging: Concepts, Research, and Outcomes*, Springer

A comprehensive overview of resilience in older age with chapters on...

Resilience in Older Age

1 Resilience: Definitions, Ambiguities, and Applications; 2 Successful Aging and Resilience: Applications for Public Health and Health Care; 3 Resilience and Personality Disorders in Older Age; 4 What Do We Know About Resilience in Older Adults? An Exploration of Some Facts, Factors, and Facets; 5 Psychological Resilience; 6 Physiological Resilience; 7 Using the Arts to Promote Resiliency Among Persons with Dementia and Their Caregivers; 8 Promoting Worker Resilience Over the Lifecourse; 9 Resilience in Aging: Cultural and Ethnic Perspectives; 10 Civic Engagement: Policies and Programs to Support a Resilient Aging Society; 11 Strengthened by the Spirit: Religion, Spirituality, and Resilience Through Adulthood and Aging; 12 Resilience in Chronic Illness; 13 The Relationship Between Resilience and Motivation; 14 The Association Between Resilience and Survival Among Chinese Elderly; 15 Fostering Resilience in Dementia Through Narratives: Contributions of Multimedia Technologies.; 16 Building Resilience in Mild Cognitive Impairment and Early-Stage Dementia: Innovative Approaches to Intervention and Outcome Evaluation; 17 African American Caregivers Finding Resilience Through Faith; 18 The Age-Friendly New York City Project: An Environmental Intervention to Increase Aging Resilience; 19 Promoting Resilience in Small-Scale, Homelike Residential Care Settings for Older People with Dementia: Experiences from the Netherlands and the United States; 20 A Geriatric Mobile Crisis Response Team: A Resilience-Promoting Program to Meet the Mental Health Needs of Community-Residing Older People; 21 Optimizing Resilience in the 21st Century; 22 Resilience in the Workplace: Job Conditions that Buffer Negative Attitudes Toward Older Workers



Windle G (2011) What is resilience? A systematic	Analyses the concept of resilience from a range of disciplinary perspectives and clarifies a definition in
review and concept analysis, Reviews in Clinical	order to inform research, policy and practice. The work takes a life course approach to resilience,
Gerontolog 21 (2) : 152-169	examining evidence derived from research across the lifespan. It incorporates the methods of
	systematic review, concept analysis and consultation through face-to-face meetings. The synthesis of
	methodological approaches enables a clear identification of the antecedents, defining attributes and
	consequences of resilience, validated with stakeholder partners. Through this process, 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. A large proportion of resilience research is rooted within the discipline of
	developmental psychology, and has mainly been developed with children and adolescents.
Fry P S and Keyes C L M (eds) (2010) New frontiers	A group of leading gerontologists and geriatric researchers explore older people's [potential to
in resilient aging: life-strengths and well-being in	overcome the challenges of old age and to pursue active lives. The contributors believe that the idea of
later life, Cambridge: Cambridge University Press:	resilience diminishing with age is a misconception. They argue that individuals may successfully
365 pp	capitalise on their existing resources, skills and cognitive processes in order to achieve new learning,
	continuing growth, and enhanced life-satisfaction.
Lavretsky H and Irwin M R (2007) Resilience and	Summarizes the literature on resilience to stress and aging. Key concepts and definitions of resilience
aging, Aging Health 3 (3): 309-324	are identified, and psychosocial and biological factors contributing to resilience that are universal
	across ages, as well as those that are unique to aging, are reviewed. Current and potentially useful
	intervention approaches to promote resilience and wellbeing are also reviewed. Views on future
	directions in resilience research and interventions targeting resilience are offered.
L	



Luthar S S, Cicchetti D and Becker B (2000) The	Often quoted definition of resilience as "a dynamic process of maintaining positive adaptation and
Construct of Resilience: A Critical Evaluation and	effective coping strategies in the face of adversity".
Guidelines for Future Work, Child Development 71	Presents a critical appraisal of resilience, a construct connoting the maintenance of positive adaptation
(3): 543-562	by individuals despite experiences of significant adversity.
	Critiques of 'resilience' have generally focused on ambiguities in definitions and central terminology;
	heterogeneity in risks experienced and competence achieved by individuals viewed as resilient;
	instability of the phenomenon of resilience; and concerns regarding the usefulness of resilience as a
	theoretical construct. The authors addresses each identified criticism in turn, proposing solutions for
	those they view as legitimate and clarifying misunderstandings surrounding those they believe to be
	less valid. Theyconclude that work on resilience possesses substantial potential for augmenting the
	understanding of processes affecting at-risk individuals.
Luthar S S and Cicchetti D (2000) The construct of	The focus of this article is on the interface between research on resilience—a construct representing
resilience: Implications for interventions and	positive adaptation despite adversity —and the applications of this work to the development of
social policies, Development and psychopathology	interventions and social policies. Salient defining features of research on resilience are delineated, as
12 (4) : 857-885	are various advantages, limitations, and precautions linked with the application of the resilience
	framework to developing interventions. For future applied efforts within this tradition, a series of
	guiding principles are presented along with exemplars of existing programs based on the resilience
	paradigm.



Jacelon, C. S (1997) The trait and process of	Resilience is the ability of people to 'spring back' in the face of adversity. It is and important concept
resilience, Journal of advanced nursing 25 (1):	for nurses as they endeavour to assist individuals to meet the challenges of living with illness and
123-129	ageing. Researchers from many disciplines in both the social and health sciences have investigated
	resilience of individuals throughout the life cycle in a variety of situations related to health as well as
	other life events. Some researchers have investigated resilience as a trait of individuals while other
	view resilience as a process. This article reviews the current literature on resilience from many
	disciplines and discusses implications for nursing practice and research.
Antonovsky A (1979) Health, Stress and Coping,	A seminal text outlining ideas of the origins of health – salutogenesis.
San Francisco, CA: Jossey Bass	According to salutogenic theory, stressors will cause harm if they violate an individual's 'sense of
	coherence'. That sense of coherence is made up of three components: (1) Comprehensibility: a belief
	that things happen in an orderly and predictable fashion and a sense that you can understand events in
	your life and reasonably predict what will happen in the future (2) Manageability: a belief that you
	have the skills or ability, the support, the help, or the resources necessary to take care of things, and
	that things are manageable and within your control; and (3) Meaningfulness: a belief that things in life
	are interesting and a source of satisfaction, that things are really worthwhile and that there is good
	reason or purpose to care about what happens.



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## b) University theses

Study	Findings
Vohora R (2011) Resilience in later life., University of Oxford - Thesis	Individuals are faced with the prospect of a range of possible losses in later life, relating to health, functioning and support networks. The construct of resilience is defined as the ability of individuals to either maintain or return to a position of positive well-being following exposure to unfavourable circumstances.  A review on resilience in old age and its relationship good mental health was conducted. Additionally, qualitative research using Interpretative Phenomenological Analysis (IPA) enabled exploration of resilience in the personal and relational context via eliciting the experience of spouse carers of individuals with dementia. The literature suggested a positive relationship between resilience and good mental health in old age. IPA revealed the presence of four key themes for seven spouse carers demonstrating moderate-very high resilience: 'Making sense of loss'; 'Successfully overcoming the challenges of caring'; 'Recognition of my own needs as a carer' and 'Looking into the future'. Resilience does not negate the experience of psychological distress altogether; however, older adults faced with a range of adverse circumstances are able to maintain good psychological functioning and manage well by drawing on personal strengths and external resources.
Windle G (2006) Variations in subjective well- being: the role of psychological resilience in older age (Thesis), University of Wales, Bangor	This thesis has provided the material for a number of more recent important publications on resilience including a review of the measurement of resilience (Windle, Bennett and Noyes, 2011) and a thorough and detailed overview of the concept of resilience in older age (Windle, 2011).



## c) Measuring resilience

Study	Findings
Windle G, Bennett K M and Noyes J (2011) A methodological review of resilience measurement scales, Health and Quality of Life Outcomes 9 (8)	This paper systematically reviews the psychometric rigour of resilience measurement scales developed for use in general and clinical populations.  Nineteen resilience measures were reviewed; four of these were refinements of the original measure.  All the measures had some missing information regarding the psychometric properties. Overall, the Connor-Davidson Resilience Scale, the Resilience Scale for Adults and the Brief Resilience Scale received the best psychometric ratings. The conceptual and theoretical adequacy of a number of the scales was questionable.  The review found no current 'gold standard' amongst the 15 measures of resilience. A number of the scales are in the early stages of development, and all require further validation work.
Resnick B A and Inguito P L (2011) The Resilience Scale: Psychometric Properties and Clinical Applicability in Older Adults, <i>Archives of psychiatric nursing</i> 25 (1): 11-20	The Resilience Scale was specifically developed to measure personality characteristics of resilience in older adults. The purposes of this article are to provide additional support for the psychometric properties of the Resilience Scale and to consider the clinical applicability of this tool. Psychometric testing included confirmatory factor analysis, Rasch analysis, and test criterion relationships for validity testing, and internal consistency and estimates of R2 for reliability testing. Although there was some support for the reliability and validity of the 25-item Resilience Scale, there was a poor fit of Items 3–6, 9, 11, 20, and 22 in the 25-item measure. Although revisions are recommended, use of the Resilience Scale can help identify older adults low in resilience and expose these individuals to interventions to improve resilience and facilitate successful aging.

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## d) The evidence base, factors linked to resilience

Study	Findings
Jeste D V, Savla G N, Thompson W K, Vahia I V, Glorioso D K, Martin A S, Palmer B W, Rock D, Golshan S, Kraemer H C and Depp C A (2013) Association Between Older Age and More Successful Aging: Critical Role of Resilience and Depression, <i>The American journal of psychiatry</i> 170 (2): 188-196	In the Successful AGing Evaluation (SAGE) study, the authors used a structured multicohort design to assess successful aging in 1,006 community-dwelling adults in San Diego County, ages 50–99 years, with oversampling of people over 80. A modified version of random-digit dialing was used to recruit subjects. Evaluations included a 25-minute telephone interview followed by a comprehensive mail-in survey of physical, cognitive, and psychological domains, including positive psychological traits and self-rated successful aging, scaled from 1 (lowest) to 10 (highest).  Results The mean age of the respondents was 77.3 years. Their mean self-rating of successful aging was 8.2, and older age was associated with a higher rating, despite worsening physical and cognitive functioning. The best multiple regression model achieved, using all the potential correlates, accounted for 30% of the variance in the score for self-rated successful aging and included resilience, depression, physical functioning, and age (entering the regression model in that order).  Conclusions Resilience and depression had significant associations with self-rated successful aging, with effects comparable in size to that for physical health. While no causality can be inferred from cross-sectional data, increasing resilience and reducing depression might have effects on successful aging as strong as that of reducing physical disability, suggesting an important role for psychiatry in promoting successful aging.



Daley S, Newton D, Slade M, Murray J and Banerjee S (2013) Development of a framework for recovery in older people with mental disorder, Wiley Blackwell *International Journal of Geriatric Psychiatry* 28 (5): 522-529 The present study aimed to evaluate whether a conceptual framework of recovery developed for working age adults holds value for users of older people's mental health services, including those with dementia. 38 qualitative interviews were undertaken with service users and carers from an older people's mental health service in South London and were analysed using grounded theory methods. Results showed that components of recovery, which appear to be meaningful to older people with mental disorder include the following: (i) the impact of illness, (ii) the significance of personal responsibility, and (iii) specific coping strategies. Unlike their younger peers, older people did not aspire to a new and revised sense of identity, nor did they seek peer support from others with lived experience of mental illness. Three components of recovery were identified as being distinct to older people: the significance of an established and enduring sense of identity; coping strategies, which provide continuity and reinforce identity; and the associated impact of physical illness. Finally, two additional components of recovery

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Ramsey J L and Blieszner R (2013) *Spiritual* resiliency and aging: hope, relationality, and the creative self, Amityville, NY: Baywood: 266 pp

This is a follow-up to the authors' previous study of eight spiritually resilient older women, in which the lives of these women are revisited. The transcripts of interviews with these women (four Americans and four Germans) have been re-examined in the light of new interviews with eight older men. The book relates to "the polarities of life" and how these older people "negotiate these polarities creatively". The book is organised in three parts: the hopeful reality of spiritual resilient ageing; the interconnected personhood of spiritually resilient elders; and reflective co-creation and the dynamics of spiritually resilient lives. An appendix explains the research methods used.



Hrostowski S and Rehner T (2012) Five years later	Hurricane Katrina devastated the Mississippi Gulf Coast in August 2005, affecting more than 90,000
: resiliency among older adult survivors of	square miles of coastline. The purpose of this study was to examine the resilience of older adult
Hurricane Katrina, Journal of Gerontological Social	survivors of Hurricane Katrina in light of their traumatic experiences and multiple losses. Ten
Work, vol 55, no 4 55 (4): 337-351	Mississippi Gulf Coast residents who survived Hurricane Katrina and its aftermath were interviewed.
	The participants were 65 years old or older. Their responses were recorded and analysed and three
	major themes emerged: participants described finding personal gratification, realising their ability to
	cope and developing a new interest in life through their novel experiences.
Gooding P A, Hurst A, Johnson J and Tarrier N	A study was to investigate psychological resilience in older versus young adults. Participants were 60
(2012) Psychological resilience in young and older	community dwelling older adults aged 65 years or older, and 60 students aged between 18-25 years.
adults, International Journal of Geriatric	Questionnaire measures of depression, hopelessness, general health and resilience were administered
Psychiatry 27 (3) : 262-270	to the participants. The resilience measure comprised three sub-scales of social support, emotional
	regulation and problem solving. Study results showed that the older adults were the more resilient
	group especially with respect to emotional regulation ability and problem solving. The young adults
	had more resilience related to social support. Poor perceptions of general health and low energy levels
	predicted low levels of resilience regardless of age. Low hopelessness scores also predicted greater
	resilience in both groups. Experiencing higher levels of mental illness and physical dysfunction
	predicted high resilience scores especially for the social support resilience scale in the older adults. The
	negative effects of depression on resilience related to emotional regulation were countered by low
	hopelessness but only in the young adults.
	nopelessiness sacting in the journey address



Tomás J M, Sancho P, Melendez J C and Mayordomo T (2012) Resilience and coping as predictors of general well-being in the elderly: A structural equation modeling approach, *Aging & mental health* 16 (3): 317-326

The aims of this article are: (a) to test for the validity of the three constructs involved in the structural model; (b) to test for the effects of both coping strategies and resilient coping on well-being in a sample of elderly, by means of a structural model with latent variables; (c) to empirically study whether a brief scale of resilient coping could predict well-being over and above that predicted by the coping resources.

Resilience in Older Age

Methods: The research is a survey design. The sample consisted of 225 non-institutionalized elderly people living in the city of Valencia (Spain). The three constructs measured were: well-being, resilient coping, and coping strategies.

Results: The analyses consist of a series of alternative structural models with latent variables with resilience, problem-focused coping, and emotion-focused coping as the potential predictors of well-being as measured by Ryff's well-being scales. Due to parsimony reasons, the model retained is that with a single predictor of well-being: resilient coping.

Conclusion: A latent variable measuring resilient coping is able to predict a significant and large part of the variance in well-being, without the need of including coping strategies. Results impact on well-being literature of the elderly is discussed.



Wiles J L, Wild K, Kerse N and Allen R E S (2012) Resilience from the point of view of older people: `Theres still life beyond a funny knee', *Social* science & medicine 74 (3): 416-424 This paper explores older people's understandings and experiences of resilience, drawing on interviews and participant-led focus groups with 121 older people living in two case-study communities in Aotearoa, New Zealand. Close reading of extended conversations about what characterises resilience, such as positive attitude, counting blessings or keeping busy, reveal how all of these apparently internal or personal characteristics are deeply embedded in social and physical contexts. The authors argue that resilience should be seen as a contextualised process which can be both individual and environmental. Older people's experiences highlight the need to consider the effectiveness of environmental community resources and social-political structures such as statefunded service availability, as well as the personal characteristics that are usually focused on when considering resilience in old age. They also argue that it is important to consider different aspects of resilience, so that a person or group might face constraints in one area, such as physical or economic wellbeing, but be strong in other areas such as social relationships or mobility. Resilience can mean acknowledging and incorporating 'vulnerability' and balancing wellbeing across a range of areas. Thus even those living with significant illness or hardship can be understood to be ageing well and indeed to be resilient. Far from using resilience as a narrow measure against which to succeed or fail, resilience is a useful concept framing how ageing well can incorporate multidimensional pathways including both vulnerability and flourishing.



Gallacher J, Mitchell C, Heslop L and Christopher G (2012) Resilience to health related adversity in older people, Emerald *Quality in Ageing and Older Adults* 13 (3): 197-204

This paper's aim is to explore factors underlying resilience to health adversity, where resilience is defined as better perceived health after adjusting for the presence of doctor diagnosed heart disease, stroke or diabetes (vascular disease).

Resilience in Older Age

A population sample of 667 men and women aged 50+ years from South Wales was recruited to participate in an epidemiologic study and were consented and assessed online. Participation included health status, psychological and cognitive assessment. Structural equation modelling was used to model causal pathways. The analysis presents baseline data for this sample.

After adjustment for vascular disease, self-esteem was associated with higher perceived health (ß=0.279, p<0.001) whilst depression was associated with lower perceived health (ß=-0.368, p<0.001). Self-efficacy and anxiety were not associated with perceived health. Further analysis found self-esteem to buffer an effect of vascular disease on depression, reducing the impact of depression on perceived health.

Cognitive and affective factors are involved in resilience, in relation to health these are specific to self-esteem and depression. Although more complex associations may be found with other adversities, in relation to health, interventions to improve self-esteem and ameliorate depression are likely to increase resilience.

Resilience has been modelled as a process involving cognitive and affective response to adversity. In the context of health, the adverse effect of depression on health perception was mediated by self-esteem. These associations add to the understanding of the processes underlying resilience and suggest opportunities for interventions designed to increase resilience to health adversities.



Cheung C-K and Kam P K (2012) Resiliency in older Hong Kong Chinese: Using the grounded theory approach to reveal social and spiritual conditions, *Journal of aging studies* 26 (3): 355-367 Resiliency refers to the personal disposition favouring resilience, which is a state of adjustment in the face of adversity. As the nature and origin of resiliency are unclear, especially in older Hong Kong Chinese, the present study adopts a qualitative, grounded theory approach to elucidate resiliency. Findings from the study are notable because they contrast with existing knowledge. The study conducted personal interviews with 15 older Hong Kong Chinese identified by elderly service workers as resilient to recent adversities. Consequently, the study identifies a grounded, social–spiritual dialectic theory that relates resiliency to its contributors in early living conditions, family socialization, and religious faith. According to qualitative data, resiliency, which is characterized by self-reliance, openness, and relaxation, turns out to be a result of isolation in living conditions and family socialization. Isolation can also lead to religious faith, which is another contributor to resiliency.

Resilience in Older Age

Walsh F (2012) Successful Aging and Family Resilience In Haslip B and Smith G (eds) Emerging Perspectives on Resilience in Adulthood and Later Life., *Annual review of gerontology & geriatrics* 32 : 153-172 This chapter examines the emerging challenges and resilience of families in later life, grounded in a developmental family systems perspective. It examines salient issues with retirement and financial security; grandparenthood; caregiving with chronic illness; and end-of-life challenges and the loss of loved ones.

Most resilience research and practice has focused on individual strengths in overcoming adversity. Notably, the positive influence of significant relationships has stood out across many studies. Individuals' resilience is nurtured in bonds with others who are invested in their well-being, believe in their potential, support their best efforts, and encourage them to make the most of their lives. For resilience in later life, relational resources are especially important to counter stereotyped expectations of aging as inevitable decline and despair.

A family systems orientation considers the broad network of relationships, identifying and recruiting potential resources for resilience in the immediate and extended family. In fostering the resilience of aging family members, positive contributions might be made by siblings, adult children and godchildren, nephews, nieces, and grandchildren, even former spouses, and other informal kin and close friends. Even in troubled families, "relational lifelines" for resilience can be found.



Vahia I V, Depp C A, Palmer B W, Fellows I, Golshan S, Thompson W, Allison M and Jeste D V (2011) Correlates of spirituality in older women, Aging & mental health 15 (1): 97-102 In a sample of community-dwelling older women enrolled at the San Diego site of the Women's Health Initiative study, the authors examined the association between spirituality and a range of variables associated with successful cognitive and emotional aging, including optimism, resilience, depression, and health-related quality of life (HRQoL).

Resilience in Older Age

Overall, 40% women reported regular attendance in organized religious practice, and 53% reported engaging in private spiritual practices. Several variables were significantly related to spirituality in bivariate associations; however, using model testing, spirituality was significantly associated only with higher resilience, lower income, lower education, and lower likelihood of being in a marital or committed relationship.

Findings point to a role for spirituality in promoting resilience to stressors, possibly to a greater degree in persons with lower income and education level.



Janssen B M, Regenmortel T and Abma T A (2011) Identifying sources of strength: resilience from the perspective of older people receiving longterm community care, European journal of ageing 8 (3): 145-156

This study seeks to explore the sources of strength giving rise to resilience among older people. Twenty-nine in-depth interviews were conducted with older people who receive long-term community care. The interviews were subjected to a thematic content analysis.

Resilience in Older Age

Findings suggest that the main sources of strength identified among older people were constituted on three domains of analysis; the individual-, interactional and contextual domain.

The individual domain refers to the qualities within older people and comprises of three subdomains, namely beliefs about one's competence, efforts to exert control and the capacity to analyse and understand ones situation. Within these subdomains a variety of sources of strength were found like pride about ones personality, acceptance and openness about ones vulnerability, the anticipation on future losses, mastery by practising skills, the acceptance of help and support, having a balanced vision on life, not adapting the role of a victim and carpe-diem.

The interactional domain is defined as the way older people cooperate and interact with others to achieve their personal goals. Sources of strength on this domain were empowering (in)formal relationships and the power of giving.

The contextual domain refers to a broader political-societal level and includes sources of strength like the accessibility of care, the availability of material resources and social policy.

The three domains were found to be inherently linked to each other.

Paige Averett, Intae Yoon, Carol L Jenkins (2011) Older lesbians: experiences of aging, discrimination and resilience, Journal of Women & Aging, vol 23, no 3 : pp 216-232

Older lesbians are at minimum subject to a triple threat of marginalisation due to ageism, heterosexism and sexism. The present study was completed to reveal the needs, strengths and experiences of a new cohort of older lesbians. 456 older lesbians responded to an online survey on topics including sociodemographics, social activity, health, sexual identity, family relationships, romantic relationships, service/programme use, mental health, end-of-life care and discrimination. Overall findings of this latest survey showed that older lesbians are resilient and have much strength in the face of both oppression and the ageing process.



Fredriksen-Goldsen K I (2011) Resilience and disparities among lesbian, gay, bisexual, and transgender older adults, *Public Policy & Aging Report* 21 (3): 3-7

Recent research by the Institute of Medicine has revealed that lesbian, gay, bisexual and transgender (LGBT) older adults are one of the least understood groups in terms of their health and ageing-related needs. This article sets out what is known about health disparities among the older LGBT community, and outlines risk and protective factors impacting the health of LGBT older adults including discrimination and victimisation, other obstacles to health care and support networks. Some policy implications for moving forward are then discussed including service and intervention developments.

Resilience in Older Age

Blane D, Wiggins R D, Montgomery S M, Hildon Z and Netuveli G (2011) *Resilience at older ages: the importance of social relations and implications for policy*, London: International Centre for Lifecourse Studies (ICLS)

The paper reports quantitative and qualitative analyses of the factors and processes which allow people at older ages to maintain good quality of life despite exposure to adversities such as longstanding illness and financial deprivation. Such resilience is examined in three UK surveys. Resilience at older ages is found to be unusual; and conditional on the level of adversity. Unexpectedly, resilience is either unrelated to, or related only weakly to, a person's socio-demographic characteristics. Instead, resilience is associated most strongly with aspects of a person's inter-personal relationships. Crucially, in longitudinal analyses, such inter-personal relationships confer resilience only if they are present before and during exposure to adversity. Qualitative analyses suggest a reason. Resilience is derived from using resources, primarily interpersonal, to stabilise the life change consequent on adversity. The policy implications of these results could be important. Policies to enhance resilience need to foster good inter-personal relationships among all older people. Examples include extension of the Londoner's Freedom Pass and the option to continue in part-time paid employment after the State Pension Age.



Faigin C A and Pargament K I (2011) Strengthened by the Spirit: Religion, Spirituality, and Resilience Through Adulthood and Aging In: Resnick B, Gwyther L P P and Roberto K A A (eds) Resilience in Aging: Concepts, Research, and Outcomes, Human beings endure a multitude of life events, from daily frustrations to the terror of combat. What factors determine whether people flourish or flounder in the face of adversity? Traditional approaches to this question have investigated the biological, sociological, and psychological. These discoveries have led to a greater understanding of the framework of resilience. However, another growing body of research, generated by the field of psychology of religion and spirituality, may further inform our appreciation of resilience pathways. Furthermore, in a meta-analysis of 49 studies, Ano and Vasconcelles (2005) concluded that positive religious coping was associated with better psychological adjustment to stress. Thus, having a benevolent relationship with the divine appears to provide a protective feature for life's turbulence.

Resilience in Older Age

Studies support the notion that when people draw on a religion that rests on a benevolent, collaborative view of the divine, their faith can provide them with a powerful resource that can lead to enhanced positive emotions, meaning-making, and social support networks.

de Paula Couto M C, Koller S H and Novo R (2011) Stressful Life Events and Psychological Well-being in a Brazilian Sample of Older Persons: The Role of Resilience, *Ageing international* 36 (4): 492-505 This study aimed to identify the most frequent stressful life events that older persons experience while identifying the most stressful ones. The sample included 111 participants, ranging from 56 to 85 years, living independently in the community. Stressful events were analyzed according to their frequency and intensity. A mean of five events were reported by participants regarding their experiences over the last year. The most frequent events were memory deterioration, deterioration in health/behaviour of a family member, death of a friend/family member, decrease in recreational activities, and personal injury/illness. The most stressful events were divorce/marital separation, parent institutionalization, and child, spouse or parent death.

A main effect of resilience was found, high resilience being associated with higher well-being. A main effect of stressful events was also found, high stress being associated with less well-being. However, the interaction between resilience and stressful events did not yield a significant result. Interpersonal variations regarding psychological well-being in response to stressful life events may reveal that older people manifest different degrees of resilience, which in turn could help to reduce the impact of stress.



Resolution Foundation (2010) Behind the balance sheet: the financial health of low earning households, London: The Resolution Foundation (electronic format only): 42 pp

Offers a fresh set of findings about how low earning households think about their money and make financial decisions. The report presents a statistical overview of the current financial health of low earners. It uses qualitative research to offer individual case studies, which highlight themes that cut across all the households met, one such being that small changes in circumstances can be very destabilising. It goes "behind the balance sheet" to capture the sometimes invisible factors that affect how people think about their money and manage their finances, such as hidden assets and liabilities, and participation in the informal economy. Three foundations are suggested for improving financial health and bringing about financial inclusion: resilience, behavioural economics, and financial capability.

Resilience in Older Age

Hildon Z, Montgomery S M, Blane D, Wiggins R D and Netuveli G (2010) Examining Resilience of Quality of Life in the Face of Health-Related and Psychosocial Adversity at Older Ages: What is "Right" About the Way We Age?, *The Gerontologist* 50 (1): 36-47

This article examines resilience at older ages, focusing on the relationships between quality of life (qol) and adversity.

Resilience is defined as flourishing despite adversity. Adversity was identified as circumstances that produce a significant average decrease in qol (CASP-19 scores). Adversity was typified by functional limitation; life getting worse in the domains of health, stress, and general living circumstances; and experiencing a negative life event. The resilient tended to report fewer multiple adversities. Indicators of protective attributes, which also characterized resilient outcomes relative to qol, included good quality relationships (5.105, confidence interval [CI] 95% 1.323–19.699), integration in the community (10.800, 95% CI 1.227–95.014), developmental coping (3.397, 95% CI 1.079–10.690), and adaptive coping styles (3.211, 95% CI 1.041–9.910).

Policies that offer access to protection and help minimize adversity exposure where possible will promote resilience.



Bennett K M (2010) How to achieve resilience as an older widower: turning points or gradual change?, *Ageing and Society, vol 30, part 3* 30 (3): 369-382

This paper draws together two conceptualisations of resilience in bereavement and widowhood that were developed by Bonanno (2004) and Moore and Stratton (2003), both using North American data. This paper has re-examined data from two United Kingdom studies of widowerhood. Among an aggregate sample of 60 widowers, 38 per cent showed resilience in the face of the exacting challenges that late-life widowhood brings. Resilient men were seen as having a positively viewed biography, were participating in relationships and activities, and had returned to a life that had meaning and brought satisfaction. Four broad categories among the resilient widowers were identified. The first had been resilient consistently throughout their widowhood. The second group achieved resilience gradually, and the third following a turning point. Finally, a small group of men demonstrated both gradual and turning point pathways towards resilience. Personal characteristics had been particularly influential for those in the first group, while for the last group, social support had made an important contribution to achieving resilience and had two forms: informal and formal.

Resilience in Older Age

Beutel M E, Glaesmer H, Wiltink J, Marian H and Brähler E (2010) Life satisfaction, anxiety, depression and resilience across the life span of men, The aging male: the official journal of the International Society for the Study of the Aging Male 13 (1): 32-39

To determine (a) the relationship between life satisfaction, anxiety, depression and ageing in the male community and (b) to identify the impact of vulnerability factors, personal and social resources on life satisfaction and distress. A stratified random sample of the German male population (N=2,144) was investigated by standardized questionnaires of life satisfaction (FLZM), depression, anxiety (PHQ), resilience (RS-11) and self-esteem (RSS).

No age-related change was found regarding overall life satisfaction. Satisfaction with health decreased in midlife (51–60 years), while the importance of health increased. Importance of and satisfaction with partnership and sexuality were only reduced in the oldest group (70+). Anxiety was highest around midlife (51–60 years), accompanied by reduced resilience and self-esteem. No clear age-related change was found regarding depression. Life satisfaction was strongly associated with resilience, lack of unemployment, the presence of a partnership, positive self-esteem, a good household income, the absence of anxiety and depression and living in the Eastern states.



Windle G, Woods R T and Markland D A (2010) Living with III-Health in Older Age: The Role of a Resilient Personality, *Journal of Happiness Studies* 11 (6): 763-777 This paper tests the hypothesis that a resilient personality moderates the impact of ill-health on subjective well-being. A cross-sectional survey drew a random sample of 1,847 people from England, Wales and Scotland aged between 50 and 90. Participants were interviewed face-to-face in their own homes. This paper examines demographic data, life satisfaction, psychological resources and ill-health. The direct and moderating effects were analysed using multiple regression. Significant main effects of resilience and ill-health on life satisfaction were found in all of the age-groups. In three of these (60–69, 70–79 and 80–90) the addition of the interaction term was associated with a significant increase in the size of the effect, indicating a resilient self moderated the negative effect of ill-health on subjective well-being. Resilient resources can be a valuable mechanism for maintaining well-being and understanding differential resistance to, and recovery from ill-health in later life.

Resilience in Older Age

Moyle W, Clarke C, Gracia N, Reed J, Cook G, Klein B, Marais S and Richardson E (2010) Older people maintaining mental health well-being through resilience: an appreciative inquiry study in four countries, *Journal of Nursing and Healthcare of Chronic Illness* 2 (2): 113-121

While there is increasing evidence of the way older people maintain physical well-being, there has not been the same emphasis when examining the ways in which older people enhance their resilience and so promote mental health well-being. An Appreciative Inquiry approach was adopted to explore the experience and strategies of mental health well-being through resilience in older people across the four participating countries on a convenience sample of 58 people over the age of 65 years from Australia, UK, Germany, and South Africa were interviewed. Data were analysed using thematic analysis.

Participants described their experiences of mental health well-being in relation to: social isolation and loneliness; social worth; self-determination; and security. Strategies utilised include promoting resilience by maintaining community connections and relationships, keeping active, and emotional, practical and spiritual coping. The findings highlight the importance of maintaining mental health well-being through resilience. Although there were some variations between countries, these strategies for maintaining well-being transcended culture and nation.



O'Rourke N, Kupferschmidt A L, Claxton A, Smith J Z, Chappell N and Beattie B L (2010) Psychological resilience predicts depressive symptoms among spouses of persons with Alzheimer disease over time, *Aging & mental health* 14 (8): 984-993

This study examines the three facets of psychological resilience (i.e., perceived control, commitment to living, challenge versus stability) as predictors of depressive symptoms over time among spousal caregivers of persons with Alzheimer disease; these resilience factors were considered over and above dementia-related and socio-demographic control variables.

Resilience in Older Age

A sample of 105 cohabiting spouses of persons diagnosed with probable or possible Alzheimer disease was recruited for this study. Multilevel modelling enabled the examination of baseline resilience, and the direction and magnitude of change in resilience over time, as distinct predictors of depressive symptoms one year later, and change in depressive symptoms between points of measurement. Both initial control and challenge predicted lower levels of depressive symptoms one year later; furthermore, an increase in challenge over this interval predicted lower second stage depressive symptoms. In contrast, commitment did not emerge as a statistically significant predictor of caregiver depression. Findings of this study provide general support for the stress process model of care-giving; in particular, the central role of intra-psychic factors as significant predictors of depressive symptoms over time.

Wells M (2010) Resilience in older adults living in rural, suburban, and urban areas, *Online Journal* of Rural Nursing & Health Care 10 (2): 45-54

To determine if resilience levels vary in older adults living in rural, urban, or suburban areas and to determine if the relationships of socio-demographic factors (age, income, education, marital and employment status), social networks, health status, and resilience vary with the location in which older adults live. Data were collected from 277 registered voters aged 65 years or over who lived in rural, suburban, or urban locations in New York State.

No differences were found in resilience levels across the three locations. In regression analysis, stronger family networks, lower household income, and good mental and physical health status were found to be significantly associated with high resilience levels.

The location in which older adults reside did not affect resilience levels. Strong social ties and good mental and physical health were associated with resilience. The surprising association with resilience was low income. Mental health status was most strongly associated with resilience in older adults.



Seidel D, Jagger C, Brayne C, Matthews F E and MRC CFAS (2009) Recovery in instrumental activities of daily living (IADLs): findings from the Medical Research Council Cognitive Function and Ageing Study (MRC CFAS), <i>Age and Ageing</i> 38 (6): 663-668	A sample of 13,004 individuals aged 65 years and above from five communities in the UK to provide evidence for predictors of recovery in instrumental activities of daily living (IADLs) among disabled older people living in the community. Participants who reported that they were unable to perform any IADL without difficulty or help at baseline ('disabled') were included in the analysis.  A minority of participants reporting disability at baseline then reported independent function at 2 years. It may be important to focus on those who seem least likely to recover once they have become disabled. Several factors that have been shown to increase the risk of disability were inversely associated with recovery, suggesting that intervention programmes could target these same factors.
Wells M (2009) Resilience in Rural Community-	To determine the resilience level of rural community-dwelling older adults and to determine if socio-
Dwelling Older Adults, The journal of rural health	demographic factors, social networks, and health status are associated with resilience.
25 (4) : 415-419	Resilience was not correlated with any of the socio-demographic factors which included gender, age,
	income, education, marital, and employment status. There was a weak positive correlation between
	social networks and resilience levels of rural older adults. Both physical and mental health status were
	positively correlated with resilience. (see also: Wells M, 2010)
Mehta M, Whyte E, Lenze E, Hardy S, Roumani Y,	The authors investigated the association of depression with apathy, resilience and disability across the
Subashan P, Huang W and Studenski S (2008)	age range of late life. 105 community-dwelling older people with moderate levels of disability were
Depressive symptoms in late life: associations	assessed using the Geriatric Depression Scale (GDS), Harley-Gill Resilience Scale, Starkstein Apathy
with apathy, resilience and disability vary	Scale and instrumental activities of daily living / activities of daily living (IADL/ADL).
between young-old and old-old, International	In the under 80s, apathy, resilience and disability scores equally contributed to the variability of the
Journal of Geriatric Psychiatry 23 (3): 238-243	GDS score. In contrast, in the 80+ group, apathy had the greatest contribution to GDS score. These data
	suggest that depressive symptoms in older people have different clinical features along the age
	spectrum.



Windle G, Markland D A and Woods R T (2008) Examination of a theoretical model of psychological resilience in older age, Taylor & Francis Aging & Mental Health 12 (3): 285-292 It is hypothesised that an overarching construct - resilience - accounts for the functioning of a number of psychological resources (self-esteem, personal competence and control). The factorial validity of the resources as indicators of resilience is tested using confirmatory factor analysis. The analyses focus on previously unexplored survey data drawn from a representative sample of 1847 people aged 50-90 in England, Wales and Scotland. The results find that a common factor (a higher-order model) provides the best explanation of the relationship between the resources, demonstrating an important first account for developing further work on the concept. Exploring what might form the basis of resilience from a psychological perspective enables a deeper understanding of why some individuals can remain positive to difficult circumstances, particularly some of the challenges of ageing.

Resilience in Older Age

Lamond A J, Depp C A, Allison M, Langer R, Reichstadt J, Moore D J, Golshan S, Ganiats T G and Jeste D V (2008) Measurement and predictors of resilience among community-dwelling older women, *Journal of psychiatric research* 43 (2): 148-154

1,395 community-dwelling women over age 60 who were participants at the San Diego Clinical Center of the Women's Health Initiative completed the Connor–Davidson Resilience Scale (CD-RISC), along with other scales pertinent to successful cognitive aging. Internal consistency and predictors of the CD-RISC were examined, as well as the consistency of its factor structure with published reports. The mean age of the cohort was 73 (7.2) years and 14% were Hispanic, 76% were non-Hispanic white, and nearly all had completed a high school education (98%). The mean total score on the CD-RISC was 75.7 (sd = 13.0). This scale showed high internal consistency (Cronbach's alpha = 0.92). Exploratory factor analysis yielded four factors (somewhat different from those previously reported among younger adults) that reflected items involving: (1) personal control and goal orientation, (2) adaptation and tolerance for negative affect, (3) leadership and trust in instincts, and (4) spiritual coping.

The strongest predictors of CD-RISC scores in this study were higher emotional well-being, optimism, self-rated successful aging, social engagement, and fewer cognitive complaints.



Netuveli G, Wiggins R D, Montgomery S M, Hildon Z and Blane D (2008) Mental health and resilience at older ages: bouncing back after adversity in the British Household Panel Survey, *Journal of Epidemiology and Community Health* 62 (11): 987-991

This paper aims to identify those members of a panel survey who demonstrated resilience, and to identify the characteristics of the resilient individuals and the predictors of their resilience. The study subjects were the 3,581 participants in the British Household Panel Survey, selected from waves 1–14, who satisfied three requirements: exposure to an adversity; availability of consecutive General Health Questionnaire (GHQ)-12 scores; aged 50 or more years. The primary outcome variable was resilience, operationalised as a GHQ-12 score that increased after exposure to adversity and returned to its pre-exposure level in the next (after 1 year) wave of the survey. The adversities were: functional limitation; bereavement or marital separation; poverty.

Resilience in Older Age

The prevalence of resilience, as defined, was 14.5%. After adjusting for regression to the mean, the GHQ-12 score of the resilient dropped by a mean of 3.6 points in the post-adversity period. Women predominated among the resilient, with this gender difference stronger among older women than younger women. The resilient were more likely to have high social support than the non-resilient, but otherwise were not different socioeconomically. High social support pre-adversity and during adversity increased the likelihood of resilience by 40–60% compared with those with low social support. Conclusions: Resilience is relatively rare and favours older women. It is fostered by high levels of social support existing before exposure to adversity.

Demakakos P, Netuveli G, Cable N and Blane D (2008) Resilience in older age: a depression-related approach In: *Banks J, Breeze E, Lessof C and Nazroo J (eds), Living in the 21st century: older people in England, ELSA 2006 (Wave 3),* 

There is no consensus about what resilience is and how to define it but it is commonly understood as the ability of people to resist and effectively overcome adversity. Thus, the existence of adversity is a necessary condition for resilience. But beyond that common understanding there are different views on: (a) whether resilience is a personality trait or a process; (b) the dimensions of resilience; (c) the validity of resilience as a concept and its consistency over time; and (d) the relationships of resilience with adaptation and whether it adds something new in developmental and lifecourse theories (Luthar, Ciccheti and Becker, 2000).

Resilience in Older Age

The analysis presented in this chapter shows that: Resilience, the ability of people to resist adversity and flourish under it, existed irrespective of the way it was measured; Resilient older people were more satisfied with their lives and had a better quality of life than non-resilient older people; Resilient older people expected to live longer than their non-resilient counterparts; Age and socio-economic status did not seem to be much related to resilience; Sex, marital status and social support were related to resilience crosssectionally but not longitudinally.

Hildon Z, Smith G, Netuveli G and Blane D (2008) Understanding adversity and resilience at older ages, *Sociology of Health and Illness* 30 (5): 726-740 The relationship between adversity and resilience is examined in this mixed methods study. It examines the dynamics of protection in a sub-sample of 139 participants from the Boyd Orr cohort aged 70-80 years.

The analysis explored adversity and protection in relationships, retirement, and health. Participants with resilient outcomes drew upon social and individual resources in the face of adversity, in particular resources that stabilised life change by providing continuity. These included: constructing narratives that reinterpreted past adversity in light of recent ones; maintaining social roles and activities that had previously brought pleasure or a sense of mastery; relying on tried and tested coping strategies; support from close ongoing relationships.

Participants with vulnerable outcomes, however, described more severe adversities, suggesting that resilience is also dependent on the degree and impact of this experience.

This study treats resilience and good quality of life as equivalent.



Ong A D, Bergeman C S, Bisconti T L and Wallace K A (2006) Psychological resilience, positive emotions, and successful adaptation to stress in later life, *Journal of Personality and Social Psychology* 91 (4): 730-749

In 3 studies, the authors investigated the functional role of psychological resilience and positive emotions in the stress process. Across studies, multilevel random coefficient modelling analyses revealed that the occurrence of daily positive emotions serves to moderate stress reactivity and mediate stress recovery.

Resilience in Older Age

Findings indicated that differences in psychological resilience accounted for meaningful variation in daily emotional responses to stress. Higher levels of trait resilience predicted a weaker association between positive and negative emotions, particularly on days characterized by heightened stress. Findings also indicated that over time, the experience of positive emotions functions to assist high-resilient individuals in their ability to recover effectively from daily stress.

Walter-Ginzburg A, Shmotkin D, Blumstein T and Shorek A (2005) A gender-based dynamic multidimensional longitudinal analysis of resilience and mortality in the old-old in Israel: the cross-sectional and longitudinal aging study (CALAS), *Social science & medicine* 60 (8): 1705-1715

To examine gender differences and similarities in health, function, familial and non-familial social networks; longitudinal resilience in those factors; and their association with risk of mortality in Israeli men and women aged 75–94. Gender differences and similarities were found at Wave 1 in longitudinal resilience and in risk factors for mortality, partially supporting a gender paradox. Men were more physically active, had better cognition, gave more help to children, relied less on paid caretakers, and attended synagogue more than women, factors associated with better health and functioning. Women had poorer health and functional status and more help from children. More physical activity, synagogue attendance, and resilience in activities of daily living (ADL) were associated with lower risk of mortality for both genders. Women's risk of mortality was reduced by smoking reduction and higher cognitive vitality, and men's by emotional support and solitary leisure activity. Both men and women were resilient, yet there were differences. Gender-neutral mortality reduction programs would include physical activity, religious services, maintenance and improvement of ADL, and engaging in solitary leisure activities; for women, smoking cessation and cognitively challenging activities; and for men, maintaining or increasing emotional ties.

This study equates resilience with mortality.



Pentz M (2005) Resilience among older adults with cancer and the importance of social support and spirituality-faith, <i>Journal of Gerontological Social Work</i> 44 (3-4): 3-22	This study investigates the psychological experience of the older person with cancer to enable social workers to better serve this population. 13 older people with cancer were interviewed in depth along with a focus group of three oncology social workers. The older people in this study were mostly resilient and full of life, despite the possible devastation of cancer. Two themes are discussed in this article: social support; and spirituality-faith (belief in God, hope, and helping others). Practice applications are discussed in relation to working with resilient and non-resilient older people with cancer.
Kinsel B (2005) Resilience as adaptation in older women, Journal of Women and Aging 17 (3): 23-40	This article discusses factors that contribute to resilience in older women. Face-to-face audio taped interviews with 17 women aged 70-80 were the primary data source. Open-ended questions related to the experience of advantage and adversity across the life span. Paths to resilience were variously affected depending on developmental, social-structural, historical and individual life story influences. Among seven factors emerging as salient to resilience in the sample are the external resource of social connectedness and internal resources, including a "head-on" approach to challenge and spiritual grounding. Pivotal in the women's lives were curiosity and extending self to others. Moving forward with life following adversity and "maverick" (non-traditional) behaviour facilitated preservation of the self in these resilient women.
Becker G and Newsom E (2005) Resilience in the face of serious illness among chronically ill African Americans in later life, <i>Journals of Gerontology:</i> Series B, Psychological Sciences and Social Sciences 60B (4): S214-S223	Resilience is an important adjunct to chronic illness management in later life. The authors examined older African Americans' philosophies about their chronic illnesses, also how those philosophies affected chronic illness management. Three to five in-depth interviews were conducted over the course of several years with 38 respondents aged 65-91. Both open-ended and semi-structured questions were asked. Respondents demonstrated determination, perseverance and tenacity, no matter how serious their illnesses were. Racism was instrumental in shaping the responses of these African Americans to their illnesses through cultural values that emphasised independence, spirituality and survival.



Nygren B, Aléx L, Jonsén E, Gustafson Y, Norberg A and Lundman B (2005) Resilience, sense of coherence, purpose in life and self-transcendence in relation to perceived physical and mental health among the oldest old, *Aging & Mental Health* 9 (4): 354-362

Different concepts have been presented which denote driving forces and strengths that contribute to a person's ability to meet and handle adversities, and to keep or regain health. The 125 participants aged 85+ in this study, part of the Umeå 85+ study in northern Sweden, ranked themselves on the Resilience Scale, Sense of Coherence Scale, Purpose in Life Test, and Self-Transcendence Scale. They also answered the SF-36 Health Survey Questionnaire.

Resilience in Older Age

The findings show significant correlations between scores on the Resilience Scale, the Sense of Coherence Scale, the Purpose in Life Test, and the Self-Transcendence Scale. Significant correlations were also found between these scales and the SF-36 Mental Health Summary among women but not men. There was no significant correlation between perceived physical and mental health.

The mean values of the different scales showed that the oldest old have the same or higher scores than younger age groups.

Regression analyses also revealed sex differences regarding mental health. Overall, the correlations between scores on different scales suggests that the scales measure some dimension of inner strength and that the oldest old have the strength at least in the same extent as younger adults.

Collins A L and Smyer M A (2005) The resilience of self-esteem in late adulthood, *Journal of Aging* and *Health* 17 (4): 471-489

The relationship between loss and change in self-esteem over a 3-year period was investigated for a subsample of 1,278 older people from the Americans' Changing Lives Study (ACL), which was used to examine loss in the domains of health, financial security, or work and career, and self-esteem before or after the loss. There was a small but significant decrease in self-esteem between Wave 1 and Wave 2 of the study. Loss is one of the domains explained by less than 1% of the variance of self-esteem change. This low incidence of loss and the small change in high levels of self-esteem are further evidence of resilience in older people's psychological well-being.



O'Rourke N (2004) Psychological resilience and	The majority of older women in enduring relationships contend with conjugal bereavement. Although
the well-being of widowed women, Ageing	most experience considerable distress in the immediate aftermath of this loss, the majority adjust over
International 29 (3) : 267-280	the course of time. This Canadian study applies the theory of psychological resilience (or hardiness) to
	this topic and 232 widowed women who remained unmarried (mean age 60.62).
	Results of this study suggest that psychological resilience is significantly associated with both
	satisfaction with life and (inversely) with psychological distress. These findings emerged despite
	statistical control for a myriad of socio-demographic factors (e.g. years married, preparation for death,
	duration of widowhood). Of the resilience factors, commitment to living appears most salient with
	respect to the well-being of widowed women
Ong A D and Bergeman C S (2004) Resilience and	In this article, the authors highlight theoretical areas of research on resilience and well-being that have
adaptation to stress in later life: empirical	received relatively little attention in previous work with older people. They identify unresolved
perspectives and conceptual implications, Ageing	methodological challenges associated with the measurement and analysis of within-person
International 29 (3) : 219-246	phenomena and elaborate on the implications of these challenges for process research in ageing
	populations. Lastly, they discuss future intervention directions to advance knowledge of resilience and
	positive health in later adulthood.
Hardy S E, Concato J and Gill T H (2004) Resilience	Data for this study relate to 546 non-disabled people aged 70+ who had experienced a stressful life
of community-dwelling older persons, Journal of	event and were recruited to the Participating Events Project (PEP) carried out in the New Haven,
the American Geriatrics Society, vol 52, no 2 52 (2)	Connecticut area. The aim was to assess their resilience to a stressful life event, for which the
: 257-262	resilience module of the Asset and Health Dynamics (AHEAD) study was used.
	Participants showed a wide range of resilience in response to a stressful event. In bivariate analysis,
	male sex, living with others, high grip strength, independence in instrumental activities of daily living
	(IADLs), having few depressive symptoms, and having good to excellent self-rated health were
	associated with high resilience.



Krause N (2003) Religious meaning and subjective well-being in late life, *Journals of Gerontology:*Series B, Psychological Sciences and Social
Sciences 58B (3): S160-S170

A major emphasis in this study is placed on assessing race differences in the relationship between religious meaning and subjective well-being. Interviews were conducted with a multivariate sample of older Whites and Blacks. Survey items were administered to assess a sense of meaning in life that is derived specifically from religion. Subjective well-being was measured with indices of life satisfaction, self-esteem and optimism.

Resilience in Older Age

The findings suggest that older people who derive a sense of meaning in life from religion tend to have higher levels of life satisfaction, self-esteem and optimism. The data further reveal that older Blacks are more likely to find meaning in religion than older Whites. In addition, the relationships between religious meaning, life satisfaction, self-esteem and optimism tend to be stronger in older African Americans than in older Whites.

Researchers have argued for some time that religion may be an important source of resilience for older Black people, but it is not clear how these beneficial affects arise. The data from this study suggest that religious meaning may be an important factor.

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