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Chapter 21

Resilience-Building Interventions for Successful and Positive

Aging

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Introduction

The United States continues to be a rapidly aging society, with the number of adults aged 65 and older expected to more than double between 2010 and 2050 (Vincent & Velkoff, 2010) and the number of adults aged 85 and older projected to increase by 350% (Wiener & Tilly, 2002). Advancing age is often associated with increased vulnerability to a unique set of stressors, including retirement, medical comorbidity, loss of loved ones, and the threat of reduced independence. As such, there has been a recent surge in both public and research interest in exploring factors that contribute to aging more successfully. One such aspect of successful aging is the concept of resilience (Vaillant, in press).

Positive constructs such as resilience may be thought of as being complements to traditional medicine in that they emphasize personal strength rather than disease or deficits (Jeste & Palmer, in press; Jeste, Palmer, Rettew, & Boardman, in press). In other words, whereas the standard medical model typically addresses how to treat diseases or symptoms, complementary/alternative medicine does this while also focusing on positive attributes in an effort to help older individuals not only live longer, but also live better. The study of resilience coincides with the rising trend toward a strengths-based approach to aging, which is slowly starting to replace, or at least complement, the traditional negative deficits view of aging. One of the goals of positive aging is for individuals to

evolve, adapt, and find meaning and purpose, despite whatever particular circumstances may arise.

The critical role of resilience in successful aging has been well documented (Lamond et al., 2008; Montross et al., 2006; Moore et al., 2015). For example, in a recent study by our group, Jeste and colleagues (2013) found significant associations between resilience and self-rated successful aging in a sample of over 1000 community-dwelling older adults. The magnitude of these effects were comparable in size to that of physical health, suggesting that increasing resilience may have as strong an effect in successful aging as reducing physical disability. This finding was further corroborated by Manning, Carr, & Kail (2014), who reported that high levels of resilience protect against the deleterious impact of chronic new conditions in older adults. Some research has suggested that, in addition to protecting against possible declines in physical health, high levels of resilience significantly contribute to longevity and become even more profound at very advanced ages, with centenarians being more resilient than any other age group (Zeng & Shen, 2010).

Given the emerging importance of resilience in health outcomes, the purpose of the present chapter is to examine the concept of resilience, specifically within the context of positive aging. We review various definitions that have been proposed and discuss how resilience can be construed within a hierarchical individual- and systems-based approach. In addition, we discuss how to measure resilience by reviewing the currently available scales. Further, we consider interventions that promote resilience. Finally, we provide suggestions for future research and give recommendations for further development of resilience interventions for older adults.

Defining Resilience

Although at face value, resilience may appear to be a relatively simple construct to define, it is actually quite complex and multifaceted. Developing a universally accepted definition has posed a significant challenge. Initially, resilience was studied primarily within the framework of developmental psychology. Specifically, children at risk of developing later psychopathology (due to environmental adversities or genetic vulnerabilities) were followed longitudinally, which led to the discovery that there was great variability in outcomes, with some children appearing to be more impervious to adverse circumstances than others (Masten & Tellegen, 2012). This observation prompted interest in the topic of resilience, which was used as a proxy to describe successful adaptation to adversity. Following the early developmental studies, the empirical literature employing the construct of resilience has expanded considerably to describe diverse sets of groups across the life span who seem to be able to adapt and to overcome a wide range of stressful circumstances.

The term *resilience* was originally derived from the mid-seventeenth century Latin word *resilire*, which means “to jump back or recoil.” However, more recent groups, such as the American Psychological Association (APA), do not define *resilience* in terms of one’s ability to bounce back to a current level of functioning but merely as “the *process* of adapting well in the face of adversity, trauma, tragedy, threats, or even significant sources of stress” (APA, 2015). In the field of developmental psychology, APA’s definition is commonly expanded even further to include not only the process of, but also the capacity for, or outcome of, successful adaptation despite challenging or threatening circumstances (Masten & Tellegen, 2012). These nuanced definitions lead to

one of the main controversies in resilience research, which is whether resilience should be best conceptualized as a fixed trait, an outcome, or a dynamic and fluid developmental process. In the field of aging, perhaps it is most appropriate for resilience to not simply be reduced to binary terms (i.e., whereby a person is or is not resilient), but rather to reflect a continuum of differing degrees of resilience across different contexts. Aging adults often encounter numerous acute and chronic stressors, and the psychological and physiological responses to these stressors likely depend not only on the individual's inherent ability to adapt to stress in general, but perhaps more specifically on the individual's ability to adapt to the stressors within a particular context and at a particular time in his or her life.

Recently, some researchers have identified a constellation of unique characteristics that have been associated with resilience. This approach tends to be person focused by grouping together individuals who seem better equipped to manage adversity and studying the commonalities between them. One study found that older adults who were more resilient tended to report fewer multiple adversities and were more likely to use adaptive, solution-driven coping, rather than avoidant coping strategies, when faced with challenges (Hildon, Montgomery, Blane, Wiggins, & Netuveli, 2010). Additional individual characteristics that have been viewed as being important contributors to resilience include commitment, dynamism, humor in the face of adversity, optimism, faith, altruism, and perceiving adversity as an opportunity to learn and grow (Lavretsky, 2014).

Investigators have also suggested that resilience may not just be an isolated quality inherent in an aging individual, but also something that can be derived from external systems, such as social support from the family. A family-perspective approach

to resilience tends to focus on the entire family system and how the family responds as a unit or system when confronted with various stressors. In contrast to focusing on individually based traits, researchers interested in family resilience emphasize the critical role of close relationships on personal outcomes. Three key concepts that have been cited as being important to successful aging from a family-resilience stance include flexibility, social support, and spirituality/religiosity (Martin, Distelberg, & Elahad, 2015).

Flexibility corresponds to a family's ability to adapt to a challenge by brainstorming potential solutions, setting positive expectations, and learning to accept major life fluctuations. Social support is based on the theory that feelings of connectedness and belonging buffer the impact of deleterious outcomes. This especially holds true for older adults who are at increased risk for isolation due to factors such as retirement, loss of friends and peers, and decreased mobility. Several reports indicate that older adults with better personal connections live longer and report improved physical and cognitive functioning (Chodosh, Kado, Seeman, & Karlamangla, 2007; Stewart & Yuen, 2011).

Spirituality has also been viewed through the lens of family resilience, as families with a shared spirituality have been shown to have a more optimistic outlook on adverse events as they can use their faith to help find inspiration, meaning, and purpose in a particular adverse event (Black & Lobo, 2008). Since older adults more frequently experience loss of loved ones, turning to family and spirituality/religion in times of grieving can act as an important coping mechanism.

In addition to individual and family resilience, the concept of community-based resilience is also gaining recognition. Among some of the community resources that have been shown to foster resilience are social connectedness and cohesion (Langdon, 1997).

Communities are variable in their ability to influence individual health and well-being outcomes in terms of community characteristics such as walkability, air quality, crime rates, and educational quality. For older adults, being included in and having access to community activities, social clubs, or volunteering may act as a protective factor against stressful circumstances. Despite its importance, one of the main limitations in studying community resilience is that the complexity of communities makes measuring resilient outcomes a formidable challenge. Compounding this difficulty even further is trying to tease out the nature of the relationship between individual, family, and community contributions of resilience. Likely, one's response to stressful experiences is best captured by how these various hierarchical levels interact with one another.

In defining resilience, it is also important to note that resilience may change as a function of development and life tasks. For example, in accord with Erikson's stages of psychosocial development, different ages pose different challenges. For example, the common challenges and stresses of an 18-year-old, which may include successful identity formation, are very different from the common challenges and stresses of an 80-year-old, which may include developing integrity and seeing him- or herself as having led a meaningful life. For this reason, it is important for researchers and clinicians to look at resilience from a life-span perspective. For older adults, specifically, old age can be typified as a period of gains, losses, and accompanied by the need to maintain stability and find meaning. The challenge of old age and how old age is viewed continues to evolve. Therefore, careful attention needs to be paid to understanding the unique stressors faced by older adults and the remarkable ability for some individuals to reduce or somehow adapt to the long-term consequences of stressors. The more we can learn about

the underpinnings of resilience and all of the intricacies involved in helping to define it, the more potential there is to develop interventions to promote successful aging.

Resilience Scales

With increasing attention on resilience over the past few decades, different approaches to measuring this construct have been developed. Most of the scales used to measure resilience have not been widely adopted; thus there is little evidence to inform the selection of specific instruments in research and clinical settings. Furthermore, the wide range of measures used across studies has led to inconsistencies relating to the characterization of potential risk factors, protective processes, and prevalence estimates of resilience (Windle, Bennett, & Noyes, 2011).

Windle et al. (2011) identified 15 validated measures of resilience. These instruments targeted groups across the life span; we focus on three instruments that have been used to measure resilience specifically in older adults. The Resilience Scale (Wagnild & Young, 1993) was developed using a sample of 810 community-dwelling older adults and assesses the degree of individual competence and acceptance of self and life events. The measure consists of items that were derived verbatim from interviews with participants; unfortunately, data regarding the comprehensive nature or generalizability of the items are not available. Scores greater than 145 indicate moderately high to high resilience, scores of 125–145 reflect moderately low to moderate levels of resilience, and scores of 120 and below indicate low resilience. In one study, this scale was examined in a sample of 125 Swedish people over the age of 85 years; this group reported higher resilience compared to a comparison sample of younger adults

(Nygren et al., 2005). These data suggest that this measure may be appropriate for use in older adults.

The Psychological Resilience scale (Windle, Markland, & Woods, 2008) is a self-report measure that was derived in part from the Resilience Scale, using a cohort of 50–90-year-old adults in Britain. Via factor analysis, items relating to self-esteem, personal competence, and interpersonal control were selected. These three aspects are theorized to serve as protective factors against risks and adversities. In a follow-up report by the same group (Windle, Woods, & Markland, 2010) resilience, as measured by this scale, appeared to moderate the negative effects of illness on perceptions of well-being in individuals, particularly among those in the 60–90-year-age groups. This measure has received limited use in the empirical study of resilience. Additional factors, such as self-acceptance and spirituality/religion, which appear to be important elements of resilience, were not included in this measure, which is another potential limitation of the instrument.

Another commonly used measure of resilience is the Connor-Davidson Resilience Scale (CD-RISC) (Connor & Davidson, 2003). This 25-item instrument was developed as a measure of coping in stressful situations and targets five factors: personal competence, trust/tolerance/strengthening effects of stress, acceptance of change and secure relationships, control, spiritual influences. A study from our research group (Lamond et al., 2008) showed the CD-RISC is an internally consistent scale (Cronbach's alpha = .92) for assessing resilience among community-dwelling older women ($n = 1395$). It yielded four factors that reflected personal control/goal orientation, adaptation and tolerance for negative affect, leadership and trust in instincts, and spiritual coping. These factors were somewhat different from those previously reported among younger adults, which could

suggest that resilience in older adults reflects a different process than among younger adults. In older cohorts, acceptance and tolerance of negative affect versus tenacity (which appears to be important in younger individuals) may contribute to resilience. This study raises an important issue regarding the measurement of resilience: aging may be associated with alterations in the underlying factor structure of instruments. The skills, qualities, or processes of a resilient response may change with different challenges associated with different times in one's life span. This possibility has important implications for the assessment of resilience in clinical and research settings within the context of aging.

There is also a 10-item abbreviated Connor Davidson Scale that has been developed for use in research (Campbell-Sills & Stein, 2007). This abridged version contains items that reflect the ability to tolerate experiences such as change, personal problems, illness, pressure, failure, and painful feelings. This 10-item measure of resilience was the scale employed in the study from our research group described earlier, finding significant associations between resilience and self-rated successful aging among community-dwelling older adults (Jeste et al., 2013). Nonetheless, most of studies employing this measure have focused on younger adults; additional research would be helpful in determining the relative merits of the 25-item versus 10-item version for use with older adults.

As noted by Windle et al. (2011), currently available measures of resilience insufficiently address cultural variability and its effect on resilience. Importantly, different cultures may place different values on what constitutes "successful outcomes." Extant measures of resilience also typically ignore or greatly minimize the role of

communities in shaping individual resilience. This is especially true in the few measures that are applied to older adults. Another limitation of current resilience measures is that, thus far, there is no general consensus on what measure is most appropriate to use in older adults, which often leads to inconsistent results across studies. Additionally, greater efforts are needed to examine the psychometric properties of measures, including their reliability and validity. There is also a paucity of studies exploring resilience in more diverse samples of older adults, such as institutionalized older adults, which is a major growing segment of the American population. Future efforts to develop more comprehensive scales would benefit from addressing these issues.

Interventions

To our knowledge, there are no published interventions specifically targeting resilience in older adults, but data from intervention studies to enhance resilience in adults more generally provide interesting avenues for potential therapeutic strategies for older adults (see Table 21.1). One example is well-being therapy to boost resilience (Fava & Tomba, 2009). This validated and empirically supported intervention promotes resilience by targeting dimensions of psychological well-being, such as environmental mastery (e.g., the individual has difficulty managing everyday affairs or improving surrounding context), personal growth (e.g., the individual has a sense of personal stagnation), purpose in life (e.g., the individual lacks beliefs that give life meaning), autonomy (e.g., the individual relies on the judgment of others to make important decisions), self-acceptance (e.g., the individual feels dissatisfied with self), and positive relations with others (e.g., the individual has difficulty forming and sustaining close relationships). Functioning in these domains is improved by training individuals to monitor instances of


well-being, to identify thoughts and beliefs associated with premature interruption of well-being, to challenge these automatic thoughts, and to pursue activities that promote well-being. This intervention has been validated in samples with mood and anxiety disorders (Fava, Rafanelli, Cazzaro, Conti, & Grandi, 1998). Aspects of this intervention may be adapted to boost well-being and resilience in older adults; for example, individuals may be encouraged to observe when they have positive interactions with friends or family members, to facilitate acceptance of changing cognitive and health status, to improve environmental mastery by education regarding community resources, and to assist with reflecting on their life to discover and appreciate their accomplishments.

<insert Table 21.1 about here>

Padesky and Mooney (2012) describe a four-step Strengths-Based Cognitive Behavioral Therapy Model designed to strengthen resilience. The four steps to resilience include (1) a search for strengths, (2) construction of a personal model of resilience, (3) applying the personal model of resilience to areas of life difficulties, and (4) practicing resilience. Specifically, in this treatment approach, therapists help teach individuals how to search for areas of competence, such as good health, positive relationships with others, self-efficacy, emotion-regulation skills, and the belief that one's life has meaning. The purpose of this search is based on the notion that individuals are already resilient in some areas of their lives, yet often are unaware of their strengths. Using the individual's own strengths, a personal model of resilience is created, which may then be used by the individual in a variety of situations, including challenging settings. This intervention also appears to be amenable for use with older adults, although it has not yet been validated with this population.

There is also growing interest in positive interventions that increase happiness and other positive psychosocial factors through pleasure, engagement, and/or meaning (Parks et al., 2015). These are salient to resilience, and many of these interventions may have some benefit in the efforts to boost resilience in a range of populations, including older adults. These positive interventions often target a variety of skills, such as maintaining a present focus and attending to the positive aspects of an experience. Individuals may also be trained in loving-kindness meditation and gratitude as a way to promote social support and life satisfaction. Goal setting, reminiscing about positive experiences, and increasing engagement in rewarding activities also appear to promote happiness. Although the utility of these interventions in strengthening resilience in older adults is unknown, they may provide potentially useful avenues to explore.

That resilience skills can be taught, sustained, and enhanced is highlighted by the US Army's Master Resilience Trainer (MRT) course (Reivich, Seligman, & McBride, 2011). Through a 10-day course, army officers are taught to build resilience by improving self-awareness of one's thoughts, emotions, and behaviors, regulating impulses, thoughts, or behaviors to attain goals, practicing optimism, identifying strengths in oneself and others, and promoting strong interpersonal relationships through effective communication and willingness to ask for and offer help. Participants are taught to identify when others are experiencing challenges to their resilience and how the MRT skills may be adapted across challenging settings, thus facilitating the maintenance of these skills over time. Additional techniques, such as goal setting, confidence building, and energy management, are used to enhance these skills and promote mastery. An interesting aspect of this program is that it was designed for delivery in a large-group

setting with breakout-group training. This suggests the possibility of adapting such a group-based program for civilian community settings to promote individual and group resilience. 

In a cohort of middle-aged and older women with breast cancer, Loprinzi et al. (2011) demonstrated the possible efficacy of the Stress Management and Resiliency Training (SMART) program in increasing resiliency and overall quality of life. In this intervention, participants attended two 90-minute group sessions in which they were taught relaxation skills, as well as techniques to delay judgment and attend to novel aspects of the environment rather than one's thoughts. Participants also learned to adopt a flexible disposition and to practice gratitude, compassion, and acceptance. The authors found that relative to the wait-list control group, women who received the SMART intervention reported improved resilience as well as quality of life, and reductions in anxiety, stress, and fatigue. The evidence of the feasibility of such a brief intervention is promising in the context of adapting a resilience-training program for older adults.

Suggestions for Future Research

Although there have been multiple efforts to characterize resilience and develop interventions to boost resilience, there are notable limitations that may be targeted by future research. At present, there is no independent gold standard of resilience, which is required when developing and testing new measures of this construct. The available measures of resilience rely on self-report, which may be susceptible to social desirability bias.

Future work with resilience in older adults will benefit from better understanding of the underlying neurobiologic parameters. For example, in their review of relevant

literature, Charney et al. (2004) suggested that severe recurrent mood disorders may be associated with decreased neuroplasticity and cellular resilience, and that development of medications to attenuate maladaptive stress responses may prove helpful in enhancing plasticity and cellular resilience. Another aspect of resilience that appears to improve with age is the construct of wisdom, which neurobiologically appears to be related to functioning in the prefrontal cortex and limbic striatum (Jeste & Harris, 2010; Meeks & Jeste, 2009). Yet another potential component of resilience in late life may be the maintenance of intact cognitive functioning. In part, such maintenance may reflect what has been labeled “brain reserve” or “cognitive reserve” (e.g., Satz, Cole, Hardy, & Rassovsky, 2011; Steffener & Stern, 2012). For example, in a 9-year follow-up study of healthy septuagenarians in the Health, Aging, and Body Composition (Health ABC) study, Rosano et al. (2012) found that maintenance of cognitive functioning was associated with greater medial temporal gray matter volume, and lower microstructure diffusivity in the cingulate cortex. In another recent report of data from the Health ABC study, Kaup et al. (2015) examined cognitive resilience over 1 to 11 years among 670 participants with the apolipoprotein ε4 allele (APOE ε4). Within this sample, cognitive resilience was found to be significantly associated with older age, higher education and literacy, more reading time, absence of diabetes mellitus and/or obesity, and absence of negative life events in the preceding year. Such findings are important in demonstrating that even among those genetically at risk for cognitive decline, cognitive resilience and/or neuroplasticity may be fostered by some potentially modifiable health and lifestyle factors.

In older adults, resilience appears to share variance with personality traits such as optimism (Lamond, et al., 2008). However, data from younger age groups suggest that resilience may be associated with adaptive coping mechanisms in response to particular stressors. Within older cohorts the characterization of the construct of resilience (i.e., whether it is related to positive attitudes or specific coping methods) warrants empirical attention. Furthermore, longitudinal research methods will be needed to examine whether the nature of resilience changes as older adults age. Similarly, the association of this construct with long-term health outcomes also remains to be fully examined.

Also related to the issue of neurocognitive resilience among the elderly, there is some emerging evidence that physical exercise may be associated with later onset or reduced age-related cognitive decline or neurodegenerative disorders (Ahlskog, Geda, Graff-Radford, & Petersen, 2011; Meeusen, 2014), but further prospective research is needed to determine the degree to which exercise has clinically significant neuroprotective effects at the individual patient level (Kirk-Sanchez & McGough, 2014), as well as the precise neurobiological mechanisms of such protective effects (Phillips, Baktir, Srivatsan, & Salehi, 2014; Zigmond & Smeyne, 2014). Related avenues for future research include the potential neuroprotective value of good sleep hygiene (Sexton, Storsve, Walhovd, Johansen-Berg, & Fjell, 2014). There is also some reason to think that antidepressant medications could have neuroprotective benefits among older adults with depression (Castren, 2004; Young, 2002), but the latter is also a possibility warranting further prospective research before firm conclusions for clinical practice can be drawn.

There is some evidence suggesting gene–environment interactions and their impact on behavioral outcomes in animals (Francis, Mellem, & Maricq, 2003) and

humans (Rutter, Moffitt, & Caspi, 2006). These data indicate that a particular set of genes may have a beneficial effect by protecting the individual from “bad” environments; another possible interpretation is that “good” environments mitigate the effect of “bad” genes. There is need to examine these gene–environment interactions in the context of resilience. Few studies have examined the relationship between genes and resilience in older adults (Moore et al., 2015). Data from our research group suggests that positive psychological traits such as optimism and resilience may be associated with selected single-nucleotide polymorphisms in *MAOA*, *IL-10*, and *FGG* genes (Rana et al., 2014). These preliminary findings warrant replication with larger sample sizes and additional methods such as pathway-based analyses, sequence-based association studies, and copy number variation analyses, as this would provide a better understanding of the complex relationship between genes and positive psychological traits.

As efforts to better characterize and assess the construct of resilience in older adults evolve, attention to intervention approaches is also necessary. As noted earlier, there are no empirically supported interventions specifically designed to increase resilience in older adults. Evidence from resilience interventions in younger cohorts and interventions to reduce loneliness in older adults (Winningham & Pike, 2007) suggest important targets for future research. For example, it is likely that concepts such as identifying areas of competence and planning how to use these strengths during challenging situations may be useful for older adults. However, the application of these methods may need modification based on the cognitive and health status of the individual. Furthermore, the nature of challenging situations and available competencies may dramatically change as the individual ages, necessitating revision of the individual’s

personal resilience model (Padesky & Mooney, 2012). In their study of an intervention to target loneliness in older adults living in an assisted-living facility, Winningham and Pike (2007) found that loneliness may dramatically increase and social support decrease without intervention. It is possible that this decline may apply to resilience as well, and future interventions may develop methods to maintain positive psychological traits in older adults living in retirement or assisted-living facilities.

Efforts to build future interventions for resilience should consider longitudinal change in the cognitive and health status of older adults and the effect of these factors on learning and executing skills to promote resilience. For example, the development of autonomy, which is often central to some resilience interventions, may or may not generalize across diverse groups of older adults.

Future interventions may also strive to promote the enhancement of both internal resources (e.g., effective coping strategies, enhanced self-efficacy) and external resources (e.g., increased social support) that may help offset stress exposure. Internal resources may be enhanced via coaching, modeling of positive responses, or group therapy support. External resources may be increased through interventions that reduce loneliness and social isolation and help to build social skills. Interventions used to foster volunteering or helping also hold promise in enhancing resilience as the value of helpful engagement has been tied to successful aging (Kahana & Force, 2008) and enhanced quality of life and well-being (Carr & Moorman, 2011; Cornwell, 2011). Additional strategies found on the APA website to help foster resilience include, but are not limited to, accepting that change is a part of living, developing and moving toward realistic goals, looking for

opportunities for self-discovery, participating in activities that bring enjoyment and relaxation, and engaging in meditation and spiritual practices (APA, 2015).

In addition, future interventions should account for the fact that there are different types of interacting resilience systems. In other words, individuals comprise families, and families comprise communities. These three hierarchical levels are not mutually exclusive, and interventions that target any one of these domains will inevitably impact resilience functioning at the other levels. Therefore, experts working together from a broad range of disciplines may be the most effective at deciding what specific level would be most appropriate for intervention in order to produce the greatest amount of change.

Conclusion

In sum, with the advancement of modern medicine, people are living longer than ever before. With advancing age comes more opportunity to be exposed to various types of stressors. Despite this increase in frequency to stressors, however, some older adults are astonishingly successful at being able to adapt, respond to, and recover from stressful experiences. One of the main goals of a positive psychiatry of aging should be to try to help elucidate some of the mechanisms that help distinguish older individuals who seem to demonstrate higher levels of resilience from those who do not (Jeste & Palmer, 2013).

This chapter was written in an effort to help shed light on the critical role of resilience on successful aging. To this effect, we have provided various proposed definitions of resilience and have reviewed the difficulty surrounding the creation of a universally accepted model. Further refinement of a universal definition is a necessary step in order to make significant progress in the area of resilience research. Researchers

should be confident that they are speaking the same language and that the results from one study of resilience are generalizable and can be used to help inform the results of a separate study of resilience. We also have discussed individual, familial, and community aspects of resilience and have noted the importance of acknowledging how these three dynamic systems interact with one another. We further have highlighted how older adults face very different challenges from those of younger adults and have provided a rationale for the importance of evaluating resilience across the life span.

In our review of resilience measures commonly used in older adults, we found several inherent limitations. Such limitations included lack of cultural sensitivity, insufficiently reported psychometric properties, and failure to use these measures in more diverse samples of older adults (e.g., older adults living in assisted-living facilities). Figuring out ways to circumvent some of these limitations by either strengthening existing measures or developing new reliable and valid measures to assess resilience in older adults should be a priority for researchers interested in this area.

A main focus of this chapter was also to review interventions that target ways to enhance resilience, as well as to provide suggestions for future research. Although there were several interventions that were shown to be effective in enhancing resilience, none of them primarily focused on older adults. This major gap in resilience research provides an important opportunity for further investigation. New innovative interventions can play a very important role in facilitating successful aging by reducing the impact of stress exposure in late life. We expect that, over time, resilience definitions, measures, and interventions will continue to improve, providing a welcome addition to the field as well as a great benefit to older adults.

Disclosure Statement

The authors have no conflicts of interest to declare.

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Table 21.1

Descriptions of Interventions Designed to Enhance Resilience

Name of Intervention	Authors and Year	Population Targeted	Brief Description	Sessions
Well-Being Therapy	Fava & Tomba (2009)	Patients with mood and anxiety disorders	This is a structured, directive, individualized short-term therapy that extends over 8–12 sessions.	<p><i>Initial sessions:</i> Focus on identifying thoughts and beliefs leading to poor well-being.</p> <p><i>Intermediate sessions:</i> Encourage thoughts and beliefs leading to positive well-being.</p> <p><i>Final sessions:</i> Patient is expected to identify moments of well-being, to be aware of well-being feelings, and to pursue well-being.</p>
Strengths-Based Cognitive Behavioral Therapy	Padesky & Mooney (2012)	Can be applied to a wide range of populations, including patients with depression and anxiety disorders, chronic pain, and sleep disorders	Highly collaborative and empirical therapy. The therapist engages the patient so that each step of therapy is a mutual construction and exploration. Patients rely on their own observations of their experience and test their personal resilience model by setting up real-world behavioral experiments.	Four steps to resilience: (1) Search for strengths within everyday experiences; (2) use strengths to construct a personal model of resilience using metaphors and images; (3) apply the model to areas of life difficulty by designing behavioral experiments and testing predictions.
Army’s Master Resilience Trainer Course	Reivich, Seligman, & McBride (2011)	Sergeants and soldiers	10-day course to teach non-commissioned officers a set of skills and techniques that build resilience so that they, in turn, can teach other soldiers.	<p>The course teaches three components: (1) <i>Definition:</i> Focuses on defining resilience, building character strengths, and strengthening relationships among and between soldiers and their families. (2) <i>Sustainment:</i> Focuses on family support, what to expect in terms of psychological reactions at various points of the deployment cycle. (3) <i>Enhancement:</i> Teaches mental skills to build confidence, goal setting, attention management, and mental imagery.</p>



Stress Management and Resiliency Training (SMART)	Loprinzi, Prasad, Schroeder, & Sood (2011)	Women diagnosed with breast cancer	Adapted from Attention and Interpretation Therapy. Program consists of two 90-minute group training sessions, an optional brief individual session, and three follow-up telephone calls.	<p><i>Group sessions:</i> Patients learn strategies (diaphragmatic breathing) and how to direct their attention away from fixations to more flexible thinking. In addition, patients learn skills such as gratitude, compassion, forgiveness, and higher meaning and purpose.</p> <p><i>Physician Sessions:</i> Optional one-on-one 30-minute session with a physician to review patient's progress.</p> <p><i>Telephone Calls:</i> Follow-up calls for 4-week intervals to remind the patients to practice the intervention and answer any questions the patients have about the intervention.</p>
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