WAYS OF BOLSTERING RESILIENCE IN OLDER ADULTS

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The Nature of the Challenge

At present, there are approximately 37 million people aged 65 years and over, in the USA, accounting for 12% of the total population.

By the year 2030, the number of individuals aged 65 years and over in the U.S. is expected to nearly double to 71.5 million, accounting for approximately 20% of the U.S. population.

The U.S. Census Bureau predicts that the 65-and-loder population will grow at a rate 3.5 times greater than that of the general population during the next 30 years. Moreover, the number of adults over the age of 85 will more than double in that time.

Older adults (65+) experience a number of <u>changes</u> in life <u>circumstances</u> that require life transitions to losses. These age-associated events include changes in:

- a) physical appearance and body composition;
- b) increasing likelihood of chronic health conditions (approximately 80% of older adults have at least one chronic health condition, and approximately 60%-65% have two or more conditions);
- c) functional limitations such as decreased stamina and mobility, diminished sensory capacities, an increasing dependence on the assistance of others. Some of the leading causes of activity limitation among older people are arthritis, hypertension, heart and circulatory diseases, diabetes and respiratory disorders.
- d) numerous losses and stressors such as having to live on a fixed income; increasing medical expenses, relocation;
- e) alterations in social position, changes in work, and financial troubles;
- f) death of family members, friends and loss of social networks, experience loneliness and social isolation;
- g) caregiving of spouse or living parents;
- h) widowhood.

Epidemiological studies indicate that an estimated 20% of adults 65 years of age and older meet the criteria for a mental disorder, including dementia, during the previous 12 months (Elmore et al., 2011; Karel et al., 2012). Significant comorbidities exist between psychiatric and cognitive disorders in late life. For instance, adults with dementia or mild cognitive impairment have high rates of depression, anxiety and behavioral disturbances, such as agitation. Americans with dementia will increase by 1.5 million during the coming decade.

Many of these stressful events may co-occur or pile up. Consider the New York Times (March 21, 2015) description of the Florida resident Teresa Mears who had to deal with her partner's death, helping to care for a mother with Alzheimer's, the loss of a steady job and the loss of her house. What is impressive about Teresa is the level of resilience and her coping ability <u>in spite of</u> these cumulative life changing events. As the adage states: "Life is flux."

In spite of the increasing number of physical, financial and psychosocial adversities, the vast majority of people (like Teresa) age well and evidence resilience. They evidence the ability to resist the negative impact of adversities and even "flourish" and achieve happiness, well-being and have a satisfactorily and good quality of life. In fact, overall the diagnosis of psychological disorders decline with age. Although, subsyndromal levels of depression and anxiety do occur.

Epidemiological studies indicate that only some 13% of those aged 65 and over meet criteria for a mental disorder other than dementia (Elmore et al., 2011).

- (1) What distinguishes "resilient" elderly individuals such as Teresa from the non-resilient elderly?
- (2) What are risk and protective factors that predict successful aging and longevity? What are the building blocks of such resilience?
- (3) How can resilience be nurtured in the elderly? Moreover, how do such interventions have to be tailored in an age-appropriate fashion?
- (4) What are the implications of these research findings for prevention, clinical applications and public policies?
- (5) Many people can maintain healthy and fulfilling lives into old age. How do they do this?

In order to begin to answer these questions, we begin with how to assess resilience.

ASSESSMENT OF RESILIENCE

Self-report Measures

Connor-Davidson Resilience Scale

Quality of Life Measure (CASP-19)

Connor and Davidson, 2003

Hyde et al., 2003

Post-Traumatic Growth Inventory

Tedeshi & Calhoun, 2004

<u>Use of Clinical Interview To Assess for Building Blocks of Resilience to Top Material and</u> <u>Social Capital</u>

Possible Interview Questions

"How often do you feel you have too little money to spend on what you feel your needs are?" ((1) Never to (5) Most of the time)

"How much can you rely on others if you have a serious problem?" "Who would you ask for help?" "Have you done so in the past?" "How did they help?" "How much can you open up to them, if you need to talk about your worries?" "What are your chances that you will live to be (present age plus 10 years), or more?" (The expectation to survive the next 10 years, predicts longevity.)

Additional Possible Questions

"What gets you going in the morning?" "What are your concessions to age?" "What are your aspirations?" "How long do you want to live?" "Without the daily drumbeat of work or family responsibilities, where do you find meaning and purpose?" "What advice, if any, would you have for youth today?"

Behavioral Indicators of Resilience

<u>Life-space</u> <u>Activity</u> (LSA) measure - - a measure of the extent and frequency of movement outside of one's home. The longer the LSA measure, the longer one lives. (Mackey et al., 2014).

In addition, a number of other <u>mobility measures</u> and <u>physical capacity measures</u> have been used that relate to the level of resilience. For example, the ability to perform transitions (getting up

from a chair after seated for long periods; climbing a flight of stairs; higher hand grip strength; and the like).

Measures of <u>Activity of Daily Living</u> (ADL) - - Ability to perform self-care behaviors (hygiene, dressing), cooking, cleaning, finances and the like, <u>independently</u> or with <u>minor assistance</u> ("Building Skills").

Assess the level of functioning by conducting an Ecological Assessment of living environment.

Assess for list of medications and medical compliance behaviors (Stop smoking, drink with moderation, safe sex practices).

Assess for sleep behavior, nutrition.

Assess for <u>Social Network</u> - - contact and support from others (Emotional, Practical, and Informational supports). Determine the nature and frequency of social supports, <u>other than</u> <u>family members</u>. Determine use of computer and other technologies (Internet, Texts, Skype, Instagram, Facebook, etc.) to maintain social contacts. Presence of a confidant.

Assess for presence of pets – especially walking the dog.

<u>Cognitive functioning</u>, especially memory functioning (short and long-term); Evidence of executive functioning skill of planning, problem solving, etc. Also, assess for ruminations, regrets, inattentiveness, impulsivity, irritability.

<u>Emotional regulation</u> – presence of subsyndromal anxiety and depression; prolonged and complicated grief disorder; hostility, anger; tolerance for distress and emotion-regulation coping skills (relaxation, acceptance, mindfulness, meditation).

Use <u>Time Lines</u> to assess for the history of resilience, engendering behaviors. These Time Lines are used as an assessment procedure:

Time Line 1 tracks with the client, from birth to the present time, the history of traumatic victimization and loss experiences, and any specific forms of intervention that were implicated when and for how long. This is an attempt to "walk in the client's shoes" and to provide a form of a Life Review process, in order to document all of the risk exposure events the client has experienced.

Time Line 2 is an attempt to review the same time period (birth to the present), but in this instance is designed to denote all examples of <u>resilience-engendering behaviors</u>. What has the client done and accomplished <u>in spite of</u> Time Line 1 stressful events? What examples of "strengths", "islands of competence", evidence of "survival skills" and "resilience" has the client been able to accomplish?

This discussion may also include any evidence from previous generations (the client's forefathers), that have been intergenerationally transmitted.

Ask "HOW" and "WHAT" questions about various ways that the client was able to develop and use strengths-based behaviors, often with the assistance of others. Check on the client's use of his/her <u>faith</u>.

Time Line 3 tracks the present and projects into the future. The clinicians can ask the following questions:

"Let me explain what I do for a living. I work with folks, like yourself. I try to find out how things are right <u>now</u> in your life and how you would like things to be improved or changed?"

"What have you tried in the past to accomplish these behavioral objectives/goals? What have you tried? What, if anything, has worked, as evident by...?"

"If we worked together, and I hope we can, then where should we begin? How would we know if what you are trying worked? What would other people notice and see changed in you and your situation?"

"Let me ask one last question, if I may. Can you foresee, envision any potential barriers, obstacles (either external or internal warning signs) that might get in the way? How can we anticipate and address these barriers, ahead of time, so you do not get blind-sided, should they occur?"

The use of such Time Lines in the assessment process can provide a framework for follow up <u>Reminiscence Therapy</u> (Birrem & Deutchman, 1991). Participants are asked to review their life histories and focus on the significant aspects of important positive and negative life events. By reviewing one's life history, participants gain a better sense of perspective concerning these life events. The review process is designed to help resolve conflicts and to help participants accept both the successes and failures of their lives.

KEYS TO AGING WELL: BUILDING BLOCKS FOR RESILIENCE

We will consider how to bolster <u>fitness</u> and <u>resilience</u> in SIX areas - - physical, interpersonal, emotional, cognitive, behavioral and spiritual.

The Role of Physical Fitness

(See http://www.evanshealthlab.com/23-and-12-hours/)

Physical activity and aerobic exercise have a very positive benefit on the health of older adults.

The greater one's <u>life space</u> (a measure of the extent and frequency of movement outside of one's home) the lower the rate of mortality (Mackey et al., 2014).

There is a relationship between the level of exercise that individuals engage in and the level of depression. Consider the findings from the following major epidemiological studies.

Alameda County study of 8,023 tracked for 26 years.

-Those who did not exercise were 1.5 times more likely to be depressed.

Finnish study of 3,403

-Those who exercised 2 to 3 times per week were less depressed, angry, stresses and cynical.

Dutch study of 19,288 twins and their families

-Those who exercised were less anxious, depressed, neurotic and more socially outgoing

Columbia study of 8,098

-Found the same inverse relationship between exercise and depression

It is estimated of roughly 35 million Americans aged 65 and older, an estimated two million have a major depressive illness and another five million have subsyndromal depressive symptoms that impact their quality of life. Suicidal rates are highest in late life (King, 2005).

The beneficial effects of exercise in reducing depression are medicated by neurobiological and psychosocial mechanisms including increases in Serotonin, Norepinephrine, and Dopamine and by stimulating the Reward Circuit in the brain.

Exercise training has been shown to increase the size of the hippocampus and serein levels of BONF that is a protein known to promote the growth and repair of brain cells, as well as increase

brain volume (prefrontal cortex) in older adults. Exercise in midlife is associated with decreased rates of developing dementia and Alzheimer's disease and slow age-related memory decline.

In a treatment trial of 120 older individuals, those who exercised with moderate intensity 3 days per week for 1 year had improved memory, increased brain-derived neurotrophic factor(BDNF), and a 2% increase in hippocampal volume. More extensive exercise over a period of 9 years was associated with reduced cognitive impairment and relative sparing of age-related atrophy of prefrontal cortical and temporal brain regions (Erickson et al., 2011).

The importance of behavioral activation and exercise in the elderly has been underscored by the findings of the neurobiological and immunological failings that accompany inactivity and depression. Frailty in the elderly can contribute to poor appetite and lead to low body mass and increased risk for other health-related conditions (e.g., increased platelet activation, increased inflammatory bone weakness that increase the risk of hip fractures).

Some 80% of seniors (65+ years) do <u>not</u> meet the National physical activity standard of 150 minutes per week of moderate-to-vigorous physical activity (e.g., brisk walking).

Individuals who spend six hours per day watching television live on average five years <u>less</u>, as a result of developing chronic diseases.

The use of Pedometers that count the number of steps taken, have been found to increase physical activity when tied into individualized step goals.

Internet-delivered behavioral interventions have been used to increase physical activity in the elderly. These programs usually involve several modules that include:

- a) <u>How to get started</u> that discuss the benefits of physical activity and instructions on selfmonitoring such as pedometers that count the number of steps taken and ways to increase overall physical activity in one's daily life;
- <u>Planning for success</u> that includes how to establish individualized goals and ratings of self-efficacy and confidence and the offering by the client of self-generated reasons for increasing physical activity. Set up a step count goal and monitor progress using a Goal Tracker program;
- c) <u>Beating the odds</u> which examines the potential barriers and strategies for overcoming such barriers, as well as ways to develop social supports.
- d) <u>Sticking with it ways to maintain an active life-style and engaging in relapse prevention exercises.</u>

These behavioral activation intervention programs are supplemented with personal coaching where a positive supportive therapeutic alliance is critical in helping seniors develop a physically

active lifestyle to the fullest extent possible (See Dlugonski et al., 2012; Tudor-Locke et al., 2011; Vandelanotte et al., 2007).

There is also a need to consider the **REASONS** seniors offer for <u>not</u> engaging in more physical activities. These Reasons fall into three categories, each requiring individually-tailored interventions.

Consider the <u>barriers</u> and <u>reasons</u> why seniors do <u>not</u> engage in physical activities.

Ask the senior: "What obstacles would keep you from increasing your level of physical and pleasurable activities?"

Their answers are likely to fall into one of three categories.

- **Type I** <u>Reasons</u> that question the data on the relationship between physical activity (exercise) and the health benefits. Seniors may offer counter-examples.
- **Type II** –<u>Reasons</u> that highlight barriers and fears. Cons outweigh the pros of exercising. Fear of falling, hurting oneself and being victimized.
- **Type III** <u>Reasons</u> that are tied to one's belief system. Fatalistic beliefs, stubbornness, not wanting to be told what to do, reminder of limitations, and the like.

In addition to enhancing one's Life Space and becoming more physically active, there is a need to ensure that the senior's basic health related needs are being met (such as nutrition, sleep, adherence to prescribed medication, safe sex practices, regular medical and dental check-ups). There is a need to encourage and challenge clients to be as independent and active as much as possible.

Interpersonal Fitness

Poor social integration and low social supports are associated with increased risk for depression and suicide. Higher risk is associated with being unmarried, divorced, recently widowed, living far from relatives, visiting infrequently with friends and relatives, not attending religious services, and not having a confidant. There is a need to distinguish between isolation and loneliness.

Loneliness is one of the best predictors of depression in the elderly, which is the most common psychiatric disorders in older adults, with anxiety disorders next. Depression and anxiety often co-occur as comorbid disorders.

More than 15% of elderly are at risk for social isolation and depression. 19% of men and 31% of women aged 65 to 69 live alone. For the elderly 85+, 43% of men and 72% of women live alone.

In the long run loneliness is as detrimental as smoking to longevity.

Social inactivity can impact on brain activity and brain functioning. The temporal-parietal function of the brain which is associated with cognitive empathy can become less active and atrophy; the Ventral Figmental Area (VTA) and nucleus accumbuns which contributes to a sense of pleasure are each impacted by chronic social inactivity. Thus, a downward spiral can develop that reinforces loneliness.

In order to bolster resilience in the elderly, there is a need to improve their interpersonal fitness by increasing their:

Social engagement with others outside of family members;

Sense of belonging and social connectedness with others;

Willingness to ask for help and help others;

Making a "gift" of one's experiences and wisdom (volunteer work, altruistic activities). Become a mentor;

Social contact with others using computer technology (Skype, Text, Email, Facebook, etc.);

Have a spouse who can act as a "Metacognitive Prosthetic Device (MPD), or as a "Surrogate Frontal Lobe (SFL), in a supportive manner. ("*Uh Oh example*");

Able to engage in a therapeutic alliance;

Keep in mind important <u>gender differences</u> in women versus men in the ways that they employ social support. Women are more likely to engage in and benefit from social relationships with other women, whereas men are more satisfied with solitary activities.

Emotional Fitness

Learn to bolster emotion regulation and distress tolerance skills.

Use acceptance strategies - - acknowledging that you are an older person with limitations, get on with things, rather than dwell (ruminate) and harbor regrets. Memorialize those you have lost - -use restorative restorying.

Nurture hope by engaging in collaborative goal-setting (short-term, intermediate and long-term realistic and practical objectives).

Face fears and <u>not</u> engage in avoidance behaviors, nor magnifying one's fears.

Identify and label emotions. "Name them in order to tame them."

Learn to "talk back to the amygdala." Do <u>not</u> allow your emotions to "hijack" your thinking part of your brain (frontal lobe executive processes).

Increase positive emotions ("bucket list activities").

Build and broaden positive emotions of optimism, curiosity, empathy, forgiveness, gratitude.

Educate about what the experience of positive emotions does to the brain and body.

Cognitive Fitness

Hold a belief that one can learn and grow, no matter what your age.

Hold beliefs that life has a purpose and has meaning.

Engage in "generativity" behaviors of wanting to contribute to future generations.

Engage in direct action problem-solving coping where indicated for potentially changeable events and use palliative coping acceptance strategies for unchangeable stressors.

Let go of what one knows to be a current reality and embrace new thoughts and behaviors. Let go of what is familiar, when it is no longer working.

Conduct life reviews and identify both the positive and negative that come with life shifts. Reminiscience Therapy.

Bend, bounce back, instead of resisting change.

Recognize that positive outcomes can arise from negative stressful events. Remember, people are not very good at affective forecasting or predicting the future.

Change the "story" you tell yourself and others. Bathe your story telling with "RE" verbs and executive metacognitive "change talk" (see <u>Roadmap to resilience</u> book, pages 127 and 136).

Behavioral Fitness

Maintain a behavioral routine.

Work to **REGAIN** independence.

Work on "Building Skills" that fall in the Zone of Potential Rehabilitation (ZPR) - - not too easy, but not too hard. Use a strategy of Selection, Optimization and Compensation. Example of the pianist Vladimir Horowitz.

Engage in pleasurable activities.

Share your "story", highlighting strengths, survival skills, islands of competence. Be sure to tell the "rest of the story". <u>In spite of behaviors</u>.

Use expressive forms of disclosure (art, dance, gardening). Participate in group activities to combat isolation, withdrawal.

Volunteer, join clubs, church groups, social activities.

Maintain contact with others via the computer, smart phone and other devices.

Journaling, scrapbooking, and whatever other activities that encourage **RE**-storying, **RE**-authoring your life. Provide examples of your ability to adapt in response to change.

Spiritual Fitness

Religious commitment, perceptions of meaning in life, life satisfaction, as well as adaptive coping have been found to reduce levels of depression and suicide rates in the elderly. Having Reasons for Living that reflect a positive orientation toward both the future and life act as buffers for depression and suicide (Heiser, 2005).

Use one's faith and religion.

Reflect on your ethnic, racial and cultural examples of intergenerational resilience ("What and how did they survive and flourish?")

If you are a veteran, reflect on evidence of resilience, "Band of Brothers", evidence of courage, live for a purpose, sense of patriotism.

Identify personal values, a "moral compass", life priorities, ("What is really important and how can you incorporate these values into your life"?) and share them with others.

Use positive religious coping responses.

QUOTABLE QUOTES REFLECTING RESILIENCE IN THE ELDERLY

(From an article in The New York Times June 7, 2015 by John Leland 'The Oldest Old' 85+: A Group Portrait)

"I should do some work because I'm getting old. So I take care of my plants. When you get older and older, you can't depend on others. You have to take care of yourself. Too smooth a life is not good. You have to train your brain to deal with difficult challenges."

"It's good to learn not to complain too much. My hands, my joints hurt a lot, but I

don't

tell my friends. People think if they complain, others will have pity, but I think it's the other way around. Who can help ya? A little pain – just take it and make yourself stronger. Take a deep breath. Try everything to heal yourself."

"Honey, I'm so much better off than so many people. I know it."

"It's more like inner happiness. Not just smiling and laughing. I have certain kind of peace and balance in myself. I am not anxious about what will happen the next minute or the next day. You let it go and you don't worry, and you lead a balanced life."

"I will start working when something happens. Why worry when it's not happening? You deal with it, but don't waste your time beforehand."

"They say that 'Heaven is my home', but I'm not homesick. I want to stay right here. I'm in no hurry."

"So now at 85, the two of you have decided to get married? Yes, this time love is different. You're never too old for sex."

PSYCHOTHERAPY WITH SENIORS

There is an adage that "*One cannot teach old dogs, new tricks*". This does <u>not</u> apply in the case of elderly individuals who have various forms of psychiatric disorders such as depression and anxiety. Research indicates that seniors benefit as much, or even more than middle-aged individuals from cognitive behavior therapies and interpersonal therapies. (Google Psychotherapy with the elderly).

Also see summaries of evidence-based psychological treatment of late-life anxiety (Ayers et al., 2007); depression (Laidlaw et al., 2005; Scogin et al., 2005); suicide prevention (Heisel & Duberstein, 2005); disruptive behaviors (Logsdon et al., 2007); schizophrenia (Van Citters et al., 2005); family care givers (Gallagher-Thompson (2008) provide an overview of behavioral and cognitive therapies with older adults, while King (2005) focuses on the assessment and treatment of depression in older adults.

There is a need, however to adjust psychotherapeutic interventions in an age-appropriate fashion. Here are a few examples of ways to conduct psychotherapy with the elderly.

- 1. As in psychotherapy with all age groups, the establishment, maintenance and monitoring of the <u>therapeutic alliance</u> (TA) is critical. Use treatment-outcome feedback on an ongoing basis to assess the quality of the TA.
- 2. Address any potential therapy-interfering behaviors, practice barriers such as transportation, timing (conduct early morning meetings), consider financial costs, and the like. Consider practical barriers like fatalistic beliefs, level of hopelessness, client's implicit theories about the ability to change, and the like.
- 3. Maintain continuity of care and be culturally-sensitive.
- 4. Conduct a risk assessment for suicidal behaviors. The need to conduct much a risk assessment is underscored by the ratio of suicide attempts to deaths for adults 65 or older which is less than 4:1, as compared with approximately a ratio of 20:1 for the general population. For instance, the suicide rates for older white males is more than 5X that of mixed-aged adults and increases every five year interval after age 65. Mood disorders and substance abuse problems are present in over 90% of older adults who die by suicide. Compared with young victims of suicide, older adults are more likely to have been experiencing a first episode of depression and less likely to have made a prior suicide attempt. Suiciders are more likely to be burdened by physical illness. In short, the elderly are more likely to complete suicide; they use more lethal methods and they are less likely to communicate suicidal intentions beforehand. Older adults often minimize or underreport depressive and suicidal symptoms and they are reluctant to seek help. Nevertheless, most visit their family doctor one month prior to their suicidal act, highlighting the need for early screening.

- 5. Engage in Collaborative goal-setting that nurtures hope in establishing SMART goals - <u>Specific, Measureable, Attainable, Relevant and Timely behavioral objectives in each specific resilience domain.</u>
- 6. When conducting sessions use Advance Organizers (provide an overview) of what will be covered in the sessions and why - how the content relates to the client's specific goals. Use discovery-oriented Socratic questioning, intermittent summaries and repetition.
- 7. Conduct simple psycho-education. Do not lecture the client. Use **CLOCK** Metaphor to educate about the interrelationships between thoughts, feelings and behaviors. The **CLOCK** metaphor entails:

12 o'clock - - external and internal triggers

- 3 o'clock - primary and secondary emotions. Treat emotions as a "commodity". "What did you do with your feelings?"
- 6 o'clock -automatic thoughts and images- self-talk....
- 9 o'clock behavior (what the client did and resultant consequences)

Convey the notion of a "vicious cycle"- the independence of thoughts, feelings, behaviors and resultant consequences. Consider "*How the client can break this vicious cycle?*" "*What have he/she tried <u>in the past</u> to break the cycle?*" "*What also could the client do to break the cycle and become more resilient?*"

- 8. Teach slowly, build in reminders (Simple Acronyms, use Handouts). Schedule extra sessions, use phone calls, texting, emails as reminders (with the client's permission). Address memory limitations.
- 9. Build on client's "strengths". Use Time Lines. Reawaken old skills. Build in generalization guidelines and put the client in a "consultative mode" - explaining, teaching, demonstrating skills. Involve significant others as Metacognitive Prosthetic Devices (MPDs), when available.
- 10. Tailor skills training in an age-appropriate fashion. For example, conduct relaxation training, but be aware of possible impact of the client's having arthritis. Solicit feedback regularly.

"When you think of needing help, what sort of thoughts and feelings come to mind?"

"What would be a good way to make sure you are getting the most of your therapy sessions?"

"Let me ask a somewhat different question - - do you ever find yourself out there, in your day to day experience, asking yourself the questions we ask each other here in therapy?"

"Let me ask, is there anything I did or did not do, said or did not say that you found helpful or unhelpful?"

- 11. When conducting cognitive restructuring procedures, keep in mind the findings that with age, seniors put less effort into remembering negative life events, and that they are more prone to highlight positive life events (Charles et al., 2003). Life Review interventions that help seniors to attend to "positive" life experiences (Time Line 2 and in spite of behaviors). Seniors often use social comparisons to others to view their situation in a more positive manner (Frieswijk et al., 2004). Also, probe about the notion of "generativity" of how the client can make a "gift" of his/her experience and "wisdom" to the next generation and to peers.
- 12. Build in relapse prevention procedures, self-attribution training ("taking credit" for changes), use the Client Checklist like the Strategies for Coping with Grief.
- 13. Build in active follow-up, booster sessions. Conduct group-based interventions and nurture a supportive environment to sustain "lasting" behavioral changes.
- 14. Have fun with clients.

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