8 Building Blocks for Resilience in Later Life

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Our plan…

• A few statistics
• Definitions
• 8 building blocks
Life Expectancy

- 1900 – 47 years
- 2000 – 78 years
- 2009 - 78.7 years
A few statistics: 65+

Demography: How many 65+

The Aging U.S. Population

Number of individuals age 65 or over (in millions):
- 2007: 38
- 2010: 40
- 2020: 54
- 2030: 70
- 2040: 77
- 2050: 81
- 2060: 87
- 2070: 93
- 2080: 97

Percentage of Population:
- 2007: 12.4%
- 2010: 12.7%
- 2020: 15.8%
- 2030: 19.1%
- 2040: 20.5%
- 2050: 20.8%
- 2060: 21.4%
- 2070: 22.2%
- 2080: 22.7%

Source: U.S. Social Security Administration
2007 OASDI Trustees Report (April 2007), Table V.A.2
1900 forward: 65+

PERCENT OF 65+

United States Projected Population Age 65+ (%)

Year

1900 2000 2010 2010 2030 2040 2050

Percent of Total Population

PERCENT OF 85+

United States Projected Population
(\%)

Year

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<tr>
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<th>65-84</th>
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<td>2050</td>
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WHAT IS RESILIENCE?

• Latin – resili = to spring back

• Recover quickly form illness, change or misfortune

• Assume original shape

• Grades
WHAT IS A GOOD OLD AGE?

• Bernice Neugarten, Ph.D., University of Chicago
• Young old – 55 to 65 years
• Old old – 85 years +

* * *

• Bernard Baruch – To me, old age is always fifteen years older than I am.”
WHAT IS A GOOD OLD AGE?

Good as it applies to:

- Meat
- Land
- Looks
- Money
- Risk
- Promises
- Doctors
- Religion
Does a good old age = health?

- Stephen Hawking - ALS
- Mother Teresa - Infirmities
- Franklin D. Roosevelt - Polio
Does a good old age = successful aging?

Figure 1. A model of successful aging.
Nature vs. nurture
Genes vs. environment

• Physical aging:
  • 70% life style
  • 30% genetics

• Cognitive aging:
  • 50% life style
  • 50% genetics

Source: Successful Aging (1998, Pantheon Books) by John W. Rowe and Robert L. Kahn
Does a good old age = living to be 100

New England Centenarian Study – Thomas Perls
Georgia Centenarian Study – Leonard Poon, Ph.D.
U.S. Centenarians Today

- 1 per 6,000 people in U.S. = 80,000
- 85% women; 15% men
- 2050 – range from 834,000 to over 4 million *

*Source: US Census Bureau
Characteristics of the 100-year olds

- Non-smokers
- Sense of humor
- Adapted to new environments
- Physically and mentally active
More…

- Avoid disease
- Stress resistant
- No particular diet
- Spiritual
- Charismatic
Does old age = thriving?

Secrets from the worlds’ happiest people:

- Denmark
- Singapore
- Mexico
- San Luis Obispo

Dan Buettner:
- “You can shape your environments to live better – longer.”
Lesson from the “thrivers”…living better

- Set reasonable goals
- Seek safe place to live where people are thriving
- Choose community where you have interests
- Find modest house with neighbors (friends) and sidewalks
- Recognize your purpose
- Find a job you love
- Take 6 weeks vacation
- Be physically active
- Spend 6 hours/day with your lover, kids and true friends
- Mediate, pray or nap daily
- Call your mother
What do we know?
The Blue Zones
Living Longest, Healthiest Life

- Sardinia, Italy
- Okinawa, Japan
- Loma Linda, CA
- Nicoya, Costa Rica
- Greece
Blue Zone Vitality Project

- Alberta Lea, MN
- 18,000 residents

Goal:
- Help residents transform the way they eat, work, exercise and play
Building block #1: Community

- Community members: purpose, passion, talent
- Restaurant owners
- City Council
- Employers
- Schools
- Super Markets
Healthways - Blue Zone Vitality Project

Beach Cities Health District:
- Redondo Beach
- Hermosa Beach
- Manhattan beach

Finances:
- BCHD - $1.8 million
- Healthways/Blue Zone - $3.5 million

Goal: Make healthy choices easy
Seventh Day Adventists - Loma Linda

Longest life expectancy in the U.S.  
M - 88 years; F – 89 years

Lifestyle attributes:
- Vegetarian
- Don’t smoke
- Exercise regularly
- Time with family
- Time with religion

- Average American dies 8-10 years sooner
- Americans have the genes to live longer than the 78.2 years life expectancy.
Building block #2: Physical activity
Chromosomes - Telomeres

- Telomeres – tip of chromosome

- Shortened telomere = the cell’s life span is shortening

- People who were couch potatoes and experienced stress… shorter telomeres

- Physical activity is a stress reducer (reduces oxidative stress on cells) may add years to our lives.

Source: Elissa Epel, Elizabeth Blackburn et al. UCSF
Building block #3: Mental activity

- Brain made up of 10-15 billion neurons; communicate with each other through release of chemicals (neurotransmitters) and through dendrites.

- By age 70 – lose 10% of neurons

- Good news – can slow the normal process
Building block #3: Mental activity

- LEARNING…anything – builds new neural pathways
Building block #3: Mental activity

- Stay mentally active
- Socialize
- Eat a healthy diet (Mediterranean)
- Include physical activity
- LEARN...anything – builds new neural pathways
Building block #4: Personality

- Affects ability to cope with stress
- Centenarians more competent, extroverted, trusting and less neurotic
- Sense of humor
- Charismatic
Building block #4: Personality

Being conscientious

(The Longevity Project by Howard S Friedman and Leslie R. Martin, Hudson Press 2011)

1. Healthier relationships, happier marriages, better friendships, healthier work situations.

2. Less prone to diseases (serotonin?)

3. More likely to live healthy lifestyles, not smoke, not drink to excess, wear seat belts, follow doctor’s orders, take meds as prescribed.
Building block #5: Attitude

Positive attitude helps individuals cope with critical events.
Building block #5: Attitude

Positive attitude helps individuals cope with critical events

People who remembered more positive life events were happier than those recalling negative event.

- Lived 7 more years than those with less positive attitude *

Combination of attitude and life satisfaction were strong predictors of survival and higher quality of life in old age.**

Source:  * Becca Levy, Yale University
Source:  ** Leonard Poon, Georgia Centenarian Study
Building block #5: Attitude continued

Walter Bortz, MD  
*Dare to be 100*  
Stanford University

- “Diet, exercise, attitude, self-renewal, etc…etc…etc.”

- Most important: “**Believe** you can reach 100…the rest will follow.”
A bit of wisdom…

• If you want to live to a ripe old age, be sure to choose your grandparents.

• Walter Bortz, M.D.
  • “Cute but wrong”

• “It’s not the cards you’re dealt that matter most, it’s how you play your hand.”
Building block #6: Relationships

- “Friends help us live longer.” *

* Source: Laura Cousin Klein, Ph.D., Penn State University.
Building block #6: Relationships

• Isolation and loneliness create responses in the body similar to those of stress compromising our immune system.

• Study of nurses under 65: Tested blood’s immune function and correlated it to attachment style. *

• Finding: Those with an “insecure attachment style” had lower immune activity and were more prone to illness.

• “Friends help us live longer.” **

* Angelo Pacardi, Francesca Battisti et al Psychosomatic Medicine, 69:40-46 (2007)
* Source: Laura Cousin Klein, Ph.D. Assistant professor of bio behavioral health, Penn State University.
Building block #6: Relationships cont’d.

- Women respond to stress differently from men*
- Women gather with women, the hormone oxytocin produces calming effect.
- Calming effect does not occur in men.
- Testosterone seems to reduce effect of oxytocin; estrogen seems to enhance it.
- Women more likely than men to “befriend” in response to stress.

*Source: S.E. Taylor, L.C. Klein, B.P. Lewis et al, Female Responses to Stress: Tend and Befriend, Not Flight or Flight, Psychological Review, 107(3), 41-429.
Nutrition and disease prevention
- Heart Disease
- Cancer
- Stroke (cerebrovascular diseases)

Nutrition and lifespan
- Calorie restriction
- Extends life span for yeasts, worms, mice, rats, etc.
- Hara hachi bu – Okinawa; eat until 80% full
Building block #8: Purpose

• Those (84%) who had a purpose said they were living the good life.*
• Shifted from pursuing money to pursuing meaning and purpose.
• Spend time with friends, family, health-related activities and brain health.

Okinawa - Ikigai – reason to wake up in the morning

* Source: MetLife Mature Market Institute, 2009
Richard Leider – executive coach

The good life –

• Live with people you love
• In the place that’s right
• Doing good work
• With a sense of purpose
8 Building Blocks for a Good Old Age…Leading to Resilience

1. Community
2. Physical activity
3. Mental Activity
4. Personality
5. Attitude
6. Relationships
7. Nutrition
8. Purpose
Is a good old age possible?
So…

1. A good old age
   - Health
   - Successful aging
   - Living to be 100
   - Thriving
   - Giving back
   - Meaning & purpose

2. Resilience
   - Attitude
   - Aspirations
   - Habits & history
The message…

• It’s personal.
• We have influence.
• The building blocks are achievable.
Your building block(s)

What can you do to increase your chances of

★ Good old age

★ Resilience

JUST DO IT!