CHALLENGING THE BARD:
Well-being And Health Into Shakespeare’s 7th Age

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Institute on Aging Colloquium
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All the world's a stage, 
And all the men and women merely players; 
They have their exits and their entrances, 
And one man in his time plays many parts, 
His acts being seven ages.

... 

The sixth age shifts
Into the lean and slippered pantaloon, 
With spectacles on nose and pouch on side; 
His youthful hose, well saved, a world too wide 
For his shrunk shank, and his big manly voice, 
Turning again toward childish treble, pipes 
And whistles in his sound.

Last scene of all, 
That ends this strange eventful history, 
Is second childishness and mere oblivion, 
Sans teeth, sans eyes, sans taste, sans everything.

-- William Shakespeare
As You Like It, Act II, Sc. VII
Old age in Shakespeare

King Lear
  I am a very foolish fond old man…I fear I am not in my perfect mind.
  Sir, I am too old to learn

Henry IV, Part I
  When sapless age and weak unable limbs should bring thy father to his drooping chair.

Much Ado About Nothing
  As they say, when the age is in, the wit is out.

The Tempest
  And as with age his body uglier grows, So his mind cankers.

Sonnet 73
  That time of year thou mayst in me behold when yellow leaves, or none, or few, do hang upon those boughs which shake against the cold
England in the 16th Century

- As You Like It (~1599)
- Life expectancy ~35
  - Shakespeare died just shy of 52
- Diseases
  - Plague
  - Smallpox
  - Syphilis
  - Typhus
  - Malaria
- Poor public sanitation
- Lack of medical care
Life and death in England

% Still Alive

Age

0-6 7-16 17-26 27-36 37-46 47-56 57-66 67-76 77-86

17th c.
2012-2014
From: Temporal Trends in Mortality in the United States, 1969-2013


Figure Legend:

Age-Standardized Death Rate From All Causes in the United States, 1969-2013

Data markers represent observed rates; lines are fitted rates based on joinpoint analysis.
Disability

Persistent images of old age
Challenging the Bard

• Aging and well-being; nuanced associations
• Well-being is a critical component of health in later life
• Well-being can be cultivated
The MIDUS study

• Survey of Mid-Life Development in the United States (MIDUS)
  • Longitudinal study of health and well-being of adults
    • Wave 1  1994-1996  N = 7,108
    • Wave 2  2004-2006  N = 4,963
    • Wave 3  2013-2015  N = 2,732

• Data collection
  • Telephone interviews and self-administered questionnaires (SAQ)
  • Laboratory sub-sample
Aging and health

**Chronic Conditions**

- % with 1+ conditions

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**ADL Disability**

- % with 1+ limitations

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Subjective health

Self-Rated Physical Health

Self-Rated Mental Health

Age
Comparative health

% Better / much better vs. Age

- <=34
- 35-44
- 45-54
- 55-64
- 65+
Successful aging

- 50% of older adults consider themselves to be aging successfully\(^1\)
  - Despite various impairments and disease conditions

\(^1\)Strawbridge et al, *Gerontologist*, 2002
Successful aging

  - Interviewed 22 women over age 60 living in San Diego County
    - What is important to aging successfully?
  - Identified some consistencies in responses
Successful aging

- Positive Attitude
  - “You do not sit and say ‘oh, woe is me’...and ‘oh, I can’t do that because I have this.’ Those words do not exist in successful aging”
  
  - “My uncle was a potato farmer and sometimes his crop would fail and he would just get up and do it again.”
Successful aging

• Self-Acceptance
  • “You got to realize that you are not [in your 30s or 40s] and still actually say ‘OK, it is all right.’ And then modify; suit your desires to what is realistic.”
Successful aging

• Purpose and growth
  • “Just don’t feel because I’ve done this all my life, that is all I can do. Try something.”

  • “Do things you really want to do. I mean even if it if you have got the money and you love to take cruises, for God’s sakes, take cruises!”
Successful aging

• Social relationships
  • “Every social interaction that I have is always a learning (process). There are so many people who have had experiences that I can glean from.”

• “Keep your old friends, make some new ones, don’t isolate yourself.”
Well-being – An introduction

• Two traditions: hedonic and eudaimonic
• Hedonic
  • Well-being results from having a greater abundance of positive emotions than negative ones
    • Measures
      • Happiness, joy
      • Depression, sadness
  • General satisfaction with life
Age and hedonic well-being

![Graph showing the relationship between age and satisfaction with life. The graph indicates a positive correlation, with satisfaction increasing with age. The x-axis represents age groups: <=34, 35-44, 45-54, 55-64, 65+. The y-axis represents satisfaction with life, ranging from 5 to 10.]
Well-being – An introduction

• Eudaimonic
  • Well-being results from deep engagement in pursuits that are personally meaningful and valued
• PWB scales (Carol Ryff)
  • Personal Growth
    • For me, life has been a continuous process of learning, changing, and growth
  • Purpose in Life
    • I enjoy making plans for the future and working to make them a reality
  • Positive social relationships
    • Most people see me as loving and affectionate
  • Self-acceptance
    • When I look at the story of my life, I am pleased with how things have turned out
Age and eudaimonic well-being

- Autonomy
- Environmental Mastery
- Personal Growth
- Positive Relations with Others
- Purpose in Life
- Self-Acceptance

The graph shows the trends of eudaimonic well-being across different age groups. The x-axis represents age groups ranging from <=34 to 65+. The y-axis represents the level of well-being, ranging from 12 to 20. Each line represents a different aspect of well-being, with trends indicating how these aspects change with age.
Challenging the Bard

• Aging and well-being; nuanced associations
• Well-being is a critical component of health in later life
• Well-being can be cultivated
What is health?

- World Health Organization
  - “Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity”

- Jimmy Carter in *The Virtues of Aging*
  - “What is good health?...more than being able-bodied, (it) involves self-regard, control over our own affairs, strong ties with other people, and a purpose in life…the key point is that physical and mental activities strengthen each other...”
Well-being and health

- Protective effects
- Buffering effects
Well-being and mortality

- **Nun Study**
  - Written expression of positive emotions at age 22 predicted longer life decades later

- **Alameda County Study (N = 6,800)**
  - Greater well-being predicted reduced mortality over a 28-year period
  - Negative feelings did not predict greater mortality

- **MIDUS**
  - Greater purpose associated with longevity at every age

- **Review and analysis of multiple studies**
  - Chida and Steptoe, *Psychosomatic Medicine*, 2009

- **Not due to genes or shared environment**
  - Sample of 4,000 Danish twins 70 years or older
Well-being and chronic conditions

The graph shows the change in number of chronic conditions over age for different PWB (Psychological Well-being) Total Score ranges. The score ranges are:
- <= 94.00
- 94.01 - 107.00
- 107.01+

As age increases, the number of chronic conditions increases for all score ranges. The highest increase is observed in the highest score range (107.01+).
Well-being and disability (MIDUS 2 – MIDUS 3)

Increase in Disability (M2-M3)

Functional Limitations

BADL  IADL

PWB scores
- Bottom 1/3
- Middle 1/3
- Top 1/3
Eudaimonic well-being and inflammation

- Buffering effects
Multimorbidity and inflammation

**IL-6**

$r = 0.28, p < .001$

**CRP**

$r = 0.18, p < .001$
Multimorbidity and inflammation: Moderation by purpose in life


Adjusted for age, gender, race, education, marital status, health status, and negative affect
The story so far

• Hedonic well-being tends to increase with age
  • Until near the end of life

• Eudaimonic well-being more nuanced
  • Purpose in life declines markedly
  • Purpose in life protective against age-related declines
    • Including mental illness
    • Buffers against negative effects of challenges
Challenging the Bard

- Aging and well-being; nuanced associations
- Well-being is a critical component of health in later life
- Well-being can be cultivated
Promoting eudaimonic well-being

- Well-being potentially modifiable
  - Well-Being Therapy (WBT)
  - Adapted for healthy adolescents (Chiara Ruini)
- Pilot project for older adults
Lighten UP!

• Program based on Cognitive Behavioral Therapy (CBT)
  • Specific focus on enhancing eudaimonic well-being
  • Adapted for older adults
    • Savoring past as well as current life experiences

• 8-week program
  • Community centers
  • Weekly 90 min group classes (12-15 per group)
  • Daily diaries
Lighten UP!

- Sample (N = 103)
  - Community-dwelling men and women in Kenosha County, WI
  - Age 59 – 97 (mean = 71.7)
  - 85.6% female
  - 38.8% married
  - 40.8% had college education or more
Outcomes

- Feasible
  - 85.4% completed 5+ classes

- Improvement in multiple assessments
Outcomes

**Eudaimonic Well-Being**

**Geriatric Depression Scale**

- 26% decrease
Outcomes

Somatic Symptoms

Trouble Falling Asleep

Pre Post

Pre Post
Perspectives on Lighten UP!

• Older adults will attend a well-being based program delivered in community settings
  • Even during Wisconsin winters!
• Significant improvements in virtually all measures
• Anecdotal evidence of impact
  • Lasting friendships and life changes
  • Desire to return for a “booster” class
In their own words…

What were some of the things you gained from Lighten UP?
- “I learned that most of my bad feelings about getting old are fixable by me. My approach and outlook are paramount to getting through and enjoying the last part of me.”
- “More aware of doing some things that were mundane but very important to my life.”

Have you made changes in your life or routines because of Lighten UP?
- “I do things with friends more. I’m exercising more.”
- “Took positive steps to control leg pain.”

What will you take away with you?
- “…the trick is to continue on – even with the obstacle. E.g. on a cruise I rent a scooter so I can get where I want to go; but I still go.”
- “I will pay more attention to my emotions. Recognize what I’m feeling and address it…maybe just let it go.”
Summary

• Well-being is a central component of what it means to be healthy
  • Protective effects
  • Compensatory effects

• Aspects of well-being critical to health decline with age

• Well-being can be promoted
  • Well-being therapy
  • How can we as a society offer more opportunities for greater engagement to our seniors?
Opportunities for older adults
Experience Corps

- High intensity engagement (>15 h/wk)
- Results
  - Reduced disability and depression\(^1\)
  - Increased physical activity\(^2\)
  - Increases in hippocampus and cortex volume\(^3\)

Improving quality of later life

A NURSERY SCHOOL AND NURSING HOME JOIN FORCES

New York Times spotlights the Manor
“In Cleveland, Young and Old Keep Tempo of Life”

University Circle is Cleveland’s Cultural Capital, and Judson Manor Puts You in the Center

To Save on Rent, Some Dutch College Students Are Living in Nursing Homes
A note on well-being

- Not the absence (or denial) of ill-being or adversity
- Well-being can be born of adversity
  - Successful adaptation to life demands
  - Ability to recognize and savor the positive
Reconciling with the Bard

• Shakespeare would write differently about aging now
• Portrayal of age includes poignancy
Thank You!