Subjective Well-being: Disparities Associated with Functional Limitations in Midlife and Old Age

Jacqui Smith

Supported by NIA R01AG040635; RC1 AG035576; U01AG009740
In general, subjective well-being (SWB) refers to an individual’s cognitive evaluation (perception) that overall things are going well in his/her life – that considering everything he/she is generally satisfied, content, and happy (i.e., that the pleasures of life prevail over any pain).

Everyone agrees that a sense of positive wellbeing is important!

Research finds that positive SWB is prospectively associated with better health and longer survival.

But there are multiple facets and pathways to SWB across the life course and factors that contribute to disparities.
SWB is Multifaceted (i):
Cognitive and Affective (Hedonic) Components

e.g., Models of Andrews (1976); Diener et al (1999); Russel (1980); Watson (1985)

Whole-of-life Satisfaction
Taking all things together, how satisfied are you with your life right now?

Domain satisfaction
How satisfied are you with your.....
Health, finances, daily life, the way you are aging

Cantril Ladder

e.g., PANAS-X
In the last 30 days / last week / yesterday....
how [often / much] did you feel.......?

Questions about these feelings:
Frequency?
Duration?
Mixtures of feelings?
Triggers / contexts?
Consequences?
SWB is Multifaceted (ii): Eudaimonic and Experiential Components

Eudaimonic: SWB is not only derived from pleasant feeling but also from feeling that the things in one’s life are meaningful and serve a purpose (e.g., personal growth, understanding others).

Experiential: SWB is derived from “activity engagement” – e.g., time spent on different activities in a day, the rhythm and social context of daily activities, and the affective experiences during those activities.

Methods
- Ecological Momentary Assessment (beeper, app)
- End-of-Day Diary (telephone, paper, web)
- The “Day Reconstruction Method”

http://www.nap.edu/catalog/18548/subjective-well-being-measuring-happiness-suffering-and-other-dimensions-of
SWB Enhances and Protects Health

Prospective associations revealed in the Health and Retirement Study

- **Life satisfaction is related to fewer doctor visits over 4 years**

- **Satisfaction with aging is related to fewer overnight hospitalizations over 6 years**
  Sun, Kim, & Smith (2016) *Psychosomatic Medicine*,

- **Purpose in life and life satisfaction are related to higher use of preventive health care services over 6 years**
  Kim, Strecher, & Ryff (2014). *PNAS*, 111(46), 16331-16336
  Kim, Kubansky, & Smith (2015). *Health Psychology*, 34, 779 - 782

From other studies:

- **Higher life satisfaction and positive self-perceptions of aging predict healthy aging and longer survival in old age**
  Gerstorf et al. 2010 *Psychology and Aging*
  Kotter-Gruehn et al. 2009 *Psychology and Aging*
  Levy & Bavishi 2016 *Journals of Gerontology: Psychological Sciences*
  Steptoe, Deaton & Stone, 2015 *Lancet*
SWB – Sources of Disparity

Gallup-Healthways 2015 State Rankings
http://www.well-beingindex.com/

Stone, Schwart, Broderick, & Deaton,
*PNAS* 2010
Steptoe, Deaton & Stone
*Lancet* 2015
SWB – Onset of Functional Limitations Matter:

Heterogeneity in *anticipation, reaction* and *adaption* to disability onset by severity and age

Findings from the German Socioeconomic Panel Study (SOEP)


Infurna & Wiest (2016)
J of Gerontology: Psych Sciences
SWB – Gradients for Physical Mobility

Disparities by household wealth quintile (SES) and age cohort

Findings from the Health and Retirement Study
N = 17,544; 2012 Wave
People with disabilities spend less time on work/productive activities and allocate more time to passive leisure (e.g., reading, watching TV) and household chores.

- Anand & Ben-Shalom (2014) *Demography* [ATUS data]

HRS 2012 Experienced Well-being Gradients averaged over 8 activities

- Over 3 years, with increased mobility limitations, activity-related happiness decreased by 3% and frustration increased by 6% (HRS 2009-2012: Smith et al, 2014)
Nationally representative survey of more than 37,000 men and women over age 50 in 23,000 households


A rich source of the longitudinal data on health, functional limitations, cognition, financial status, work, geographical mobility, family, GWAS, biomarkers, together with indicators of psychosocial factors, subjective well-being, and biomarkers (since 2006)

Opportunities to link survey responses with administrative data (e.g., Medicare).

Research Opportunities in HRS:
www.hrsonline.isr.umich.edu
100 years of life histories in the US: Coverage in HRS
<table>
<thead>
<tr>
<th>Subjective Well-being</th>
<th>Lifestyle &amp; Stress</th>
<th>Quality of Social Ties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life satisfaction</td>
<td>Activities in daily life*</td>
<td>Social Network composition</td>
</tr>
<tr>
<td>Domain satisfaction*</td>
<td>Social participation</td>
<td>Quality of Relationships:</td>
</tr>
<tr>
<td>Depressive symptoms</td>
<td>Neighborhood cohesion</td>
<td>Positive and Negative</td>
</tr>
<tr>
<td>Positive affect*</td>
<td>Religiosity</td>
<td>Support received from</td>
</tr>
<tr>
<td>Negative affect*</td>
<td>Discrimination</td>
<td>spouse/child/kin/friends</td>
</tr>
<tr>
<td>Purpose in life</td>
<td>Lifetime traumas</td>
<td>Early parental relationships*</td>
</tr>
<tr>
<td>Personal growth</td>
<td>Early life experiences</td>
<td>Frequency of contact with</td>
</tr>
<tr>
<td>Financial strain</td>
<td>Stressful life events</td>
<td>friends, children, family</td>
</tr>
<tr>
<td>Experienced Well-being † **</td>
<td>Ongoing stress experiences</td>
<td>Loneliness</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Personality</th>
<th>Work-related Beliefs</th>
<th>Self-related Beliefs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extraversion</td>
<td>Work stress</td>
<td>Personal mastery (control)</td>
</tr>
<tr>
<td>Neuroticism</td>
<td>Work discrimination</td>
<td>Perceived constraints</td>
</tr>
<tr>
<td>Openness</td>
<td>Work satisfaction</td>
<td>Domain-specific control</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>Perceived Capacity to work*</td>
<td>Hopelessness</td>
</tr>
<tr>
<td>Conscientiousness*</td>
<td>Effort-reward balance</td>
<td>Subjective age*</td>
</tr>
<tr>
<td>Impulsivity*</td>
<td>Work support</td>
<td>Self-perceptions of aging*</td>
</tr>
<tr>
<td>Cynical hostility</td>
<td>Work/family priorities</td>
<td>Subjective social status</td>
</tr>
<tr>
<td>Anxiety</td>
<td>Work/life balance</td>
<td>Optimism/Pessimism</td>
</tr>
<tr>
<td>Anger</td>
<td></td>
<td>Need for Cognition*</td>
</tr>
</tbody>
</table>

* Items added in 2008 /2010
† Items added in 2012
** Items included in off-year mail and internet studies

HRS PSYCHOSOCIAL & WELL-BEING CONSTRUCTS