Modifiability of Middle-Aged and Older Adults’ Views on Aging

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APA Symposium: 45 Years of Influence of the Life-Span Developmental Approach
A Bit Of History

• The life-span developmental approach has a long and rich history.

• Indeed, several historical reviews (Groffmann, 1970; Reinert, 1979; Baltes, 1983) suggest that the major historical precursors of scientific developmental psychology were all *life-span oriented* rather than child-centered in their approach.
A Bit Of History

• **European precursors:**
  (2) Adolphe Quetelet (1835): Major contributions to developmental methodology.
  (3) Charlotte Bühler (1933): “The Human Life Course as Psychological Problem”
  (4) Carl Gustav Jung (1933): Individuation as the “developmental task” in the second half of life.
A Bit Of History

• **North-American precursors:**
  (1) G. Stanley Hall (1922): “Senescence”
  (2) Robert J. Havighurst (1948): “Developmental Tasks and Education” → developmental task concept
  (3) Pressey & Kuhlen (1957): First American textbook “Psychological Development Through the Life Span”
  (6) Institute of Human Development at the University of California at Berkeley
The overall objective of life-span developmental psychology is “... to obtain knowledge about general principles of life-long development, about individual differences and similarities in development, as well as about the degree and conditions of individual plasticity or modifiability of development” (Baltes, 1987, p. 611).

Within-person modifiability as a key proposition of life-span developmental psychology.
Why Focus on Views on Aging?

• Two primary reasons:

(1) Views on aging influence how adults approach their own aging and whether or not they engage in behaviors that are known to promote healthy aging (e.g., engaging in physical activity).

(2) There is a big discrepancy between the public’s views on aging and experts’ views.
Public Knowledge vs. Expert Knowledge

http://frameworksinstitute.org/assets/files/aging_mtg.pdf
The Public’s View On Aging

• Changes that come with aging
  ... are all negative (“going downhill”);
  ... are not amenable to intervention (“they run their course”); and
  ... are irreversible (“age-related losses are permanent”).
The Experts’ View On Aging

• In contrast, experts emphasize that aging
  ... is a *lifelong* and *cumulative process*;
  ... is *distinct* from disease and decline;
  ... comes with *challenges* and *opportunities*.

• With the right contextual and social support, older adults can remain (mostly) healthy and
  *maintain high levels of functioning*. 
The AgingPLUS Program

• We have developed the AgingPLUS program to address adults’
  ➢ negative views on aging (NVOA); and
  ➢ low internal control beliefs.

• Both of these factors are well-documented attitudinal barriers to healthy aging, and showing that they can be modified may open new avenues for intervention.
Negative Views on Aging (NVOA)

• NVOA refer to a person’s negative attitudes and self-perceptions about growing old(er), including the attitudes that aging is all negative, uncontrollable, and irreversible (for a review, see Hess, 2006).

• NVOA, including negative age stereotypes, take on critical significance in midlife and old age because they lead to negative self-stereotyping and thereby undermine adults’ motivation and behavior (Levy, 2009).
Negative Views on Aging (NVOA)

• NVOA predict a host of *negative outcomes*:
  ➢ poorer memory performance (Levy, 1996), slower walking speed (Levy & Leifheit-Limson, 2009), or reduced will to live (Levy et al., 2000);
  ➢ greater decline in physical and cognitive functioning over time (Kotter-Grühn et al., 2009; Robinson et al., 2016; Sargent-Cox et al., 2012);
  ➢ slower recovery from disability (Levy et al., 2012);
  ➢ more pronounced biomarkers of Alzheimer’s disease (Levy et al., 2016); and
  ➢ reduced longevity (Kotter-Grühn et al., 2009; Levy et al., 2002).
Internal Control Beliefs

• Individuals with low internal control beliefs engage less in health-promoting behaviors, such as
  ➢ ... exercising regularly;
  ➢ ... eating a healthy diet; or
  ➢ ... having regular doctor visits (see Lachman et al., 2011).

• In contrast, individuals with a high sense of personal control tend to have better health and are less likely to become disabled (Fauth et al., 2007).
Why Focus on Physical Activity?

• Engagement in physical activity is the *most promising non-pharmacological, non-invasive, and cost-effective method of health promotion* (e.g., Kohl et al., 2012; Powell et al., 2011).

• However, *the majority of adults do not engage in regular physical activity* (Ashe et al., 2009).

• Moreover, *persons over the age of 50 are the most sedentary segment of the adult population*, and engagement in physical activity tends to decline with age (Harvey et al., 2013).
The AgingPLUS Program

- AgingPLUS is an 8-week program consisting of:
  - an educational component (Weeks 1-4), and
  - a behavioral component (Weeks 5-8).

- Educational Component:
  - 2-hour group meetings/week discussing NVOA, behavioral plasticity, and internal control beliefs.
  - Homework assignments for next week.
  - In Week 3, participants choose a physical activity goal, which they practice for 1 week.
The AgingPLUS Program

• **Behavioral Component:**
  - Participants practice their chosen physical activity as much as possible.
  - Record their exercise in a daily activity log (type, amount, intensity, enjoyment).
  - Receive a weekly phone call to talk about successes and setbacks.
  - Phone calls provide support and encouragement.
Program Feasibility

• Conducted a *feasibility study* with 62 middle-aged and older adults (mean age = 64.7 years; 68% currently not exercising) to assess the *acceptability and efficacy of the program*.

• Average *attendance* was 93.6 %.

• *Drop-out rate* was low:
  - 11.3 % after Week 4
  - 16.1 % (cumulative) after Week 8

• *Acceptability* of and *satisfaction* with the program were very high (85-100 % positive response depending on question).
Program Efficacy: Views on Aging

Awareness of Age-Related Gains

\[ F(2, 102) = 24.32, \ p < .001, \ \eta_p^2 = .32 \]
Program Efficacy: Views on Aging

![Age Stereotypes Chart]

$F(2, 102) = 22.70, \ p < .001, \ \eta_p^2 = .31$
Program Efficacy: Views on Aging

Expectations Regarding Aging

$F(2, 102) = 22.70, \ p < .001, \ \eta^2_p = .31$
Program Efficacy: Control Beliefs

Motivational Self-Efficacy

<table>
<thead>
<tr>
<th>Week</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 2</td>
<td>6</td>
</tr>
<tr>
<td>Week 3</td>
<td>6</td>
</tr>
<tr>
<td>Week 12</td>
<td>5</td>
</tr>
</tbody>
</table>

$F(2, 102) = 6.46, \ p < .01, \ \eta^2_p = .11$

Internal Control Beliefs

<table>
<thead>
<tr>
<th>Time</th>
<th>Score</th>
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<tbody>
<tr>
<td>Baseline</td>
<td>35</td>
</tr>
<tr>
<td>Week 12</td>
<td>35</td>
</tr>
</tbody>
</table>

$F(1, 51) = 14.48, \ p < .001, \ \eta^2_p = .22$
Program Efficacy: Physical Activity

F(2, 98) = 24.70, p < .001, ηp² = .34
Summary

• The AgingPlus program resulted in:
  - significant improvements adults’ views on aging;
  - significant improvements in control beliefs; and
  - increased engagement in physical activity.

• We consider these very promising findings in terms of the feasibility and efficacy of the program.

• Overall, these findings show that middle-aged and older adults’ NVOA and low control beliefs are not cast in stone but can be modified.

• Focusing on these social-cognitive and motivational factors holds promise for the development of new interventions to promote healthy and successful aging.
Limitations

• Several limitations need to be acknowledged:
  ➢ The study did not include a control group.
  ➢ Outcome measures were all based on self-report.
  ➢ The follow-up period was rather short.

• We have addressed two of these limitations in a second study that we are just finishing up.

• A grant application to the National Institute on Aging to secure funding for a randomized controlled trial (RCT) is pending.
Acknowledgments

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References


