

creating Ways to Age Well.SM

Self-Fulfilling
Prophecy
How Perceptions of
Aging Affect Our Later
Years

By Jennifer L. Smith, PhD, Senior Research Manager Mather LifeWays Institute on Aging



"Whether you think you can, or you think you can't—you're right."

— Henry Ford

Perceptions of aging, or attitudes toward one's own aging, have important implications for the health and well-being of older adults (Levy, 2009). Throughout the life span, people encounter many positive and negative stereotypes of older adults and the aging process. Some stereotypes portray common age-related changes, whereas others promote misconceptions about aging. As people grow older, age stereotypes become increasingly self-relevant; these stereotypes are reflected inward and they become incorporated into older adults' self-perceptions of aging (Levy, 2009).

THE PERCEPTIONS OF AGING LENS

Perceptions of aging can be thought of as a lens that shapes how older adults interpret their daily experiences and establish cause-and-effect explanations for events. For instance, older adulthood can be viewed as a time of continued development and learning (positive perception of aging) or as a time of physical and mental decline (negative perception of aging). Self-perceptions of aging tend to influence thoughts and behaviors without people being consciously aware that this is happening (Levy, 2009).

Imagine that two older adults, Diane and Nora, slipped on an icy sidewalk and they each sprained an ankle. Throughout her recovery, Diane diligently completed physical therapy, eager to return to full strength and resume her normal daily activities. Her mobility was limited for a while, but Diane took this opportunity to catch up on some books that she wanted to read and she learned new ways to keep in touch with family and friends on her tablet. When Nora fell, she knew that life was just going to get worse from there. Nora didn't really see the point of the rehabilitation exercises, because she didn't believe that a full recovery was possible. It was difficult to get around, so Nora started to keep to herself more and she stopped taking her regular walks even after her ankle was healed. Diane made a full recovery, but Nora's physical health continued to decline because she never returned to the same level of activity. Despite experiencing the same injury, Diane's and Nora's perceptions of aging influenced how they responded to the injury and led to a very different chain of events.

OUTCOMES RELATED TO PERCEPTIONS OF AGING

The story above illustrates how self-perceptions of aging can create self-fulfilling prophecies (Levy, Slade, Kasl, 2002), leading to long-term consequences for the well-being of older adults. Researchers have found

Self-perceptions of aging tend to influence thoughts and behaviors without people being consciously aware that this is happening.



that negative perceptions of aging have harmful consequences for older adults' bodies, minds, and healthy behaviors, as outlined below:

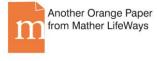
Longevity. In a 23-year study, older adults who reported more positive self-perceptions of aging lived 7.5 years longer than older adults with more negative self-perceptions of aging (Levy, Slade, Kunkel, & Kasl, 2002). Additional research supports this connection between perceptions of aging and longevity, leading the researchers to conclude that "...those who develop positive perceptions of aging over the life course enter late life with a distinct advantage that may be protective against negative consequences of health change" (Sargent-Cox, Anstey, & Luszcz, 2014, p. 171).

Illness. In a study of 1,286 people (average age of 57 at baseline), participants who indicated that aging is a time of continued learning and development reported decreases (or slower increases) in physical illnesses six years later (Wurm, Tesch-Römer, & Tomasik, 2007). In contrast, participants in the same study who believed that aging is a time of physical loss displayed increases in physical illness over six years.

Functional Health. Older adults with more positive perceptions of aging report better future functional health, such as the ability to do household chores and climb stairs, compared to older adults with more negative perceptions of aging (Levy, Slade, & Kasl, 2002). Consistent with these findings, older adults with more negative perceptions of aging displayed greater limitations in activities of daily living (e.g., feeding, bathing) and instrumental activities of daily living (e.g., shopping, managing finances) three years later (Moser, Spagnoli, & Santos-Eggimann, 2011). None of those participants reported any limitations at the beginning of the study (ages 65 to 70).

Brain Health. Compared to people with more positive views of aging, people who endorsed more negative age stereotypes displayed greater signs of risk factors for Alzheimer's Disease when their brains were examined decades later. The hippocampus, an area of the brain related to memory, decreased in size at a faster rate and there was an increased presence of amyloid plaques and neurofibrillary tangles (Levy, Ferrucci, Zonderman, Slade, Troncoso, & Resnick, 2016).

Psychological Well-Being. Older adults with more negative perceptions of aging reported greater increases in depressive symptoms three years later, but high levels of optimism helped protect against this effect (Wurm & Benyamini, 2014). The researchers concluded that positive emotions and optimism may help buffer the harmful effects of negative perceptions of aging. In another study, positive perceptions of aging contributed to better self-reported health and life satisfaction six years later, even for participants who reported a serious health event (Wurm, Tomasik, Tesch-Römer, 2008).



Older adults with positive self-perceptions of aging reported engaging in more preventive health behaviors over 20 years.

Healthy Behaviors. Older adults with more positive perceptions of aging tend to engage in more preventive health behaviors and physical activity compared to older adults with more negative perceptions of aging. For example, older adults with positive self-perceptions of aging reported engaging in more preventive health behaviors over 20 years (Levy & Myers, 2004). Evidence also links negative perceptions of aging with declines in walking speed two years later (Robertson, Savva, King-Kallimanis, 2015). Furthermore, older adults with more positive views of aging reported more frequent walking and sporting activities (Wurm, Tomasick, & Tesch-Römer, 2010).

Overall, these findings support the conclusion that perceptions of aging create self-fulfilling prophecies. Older adults who associate aging with ongoing growth and pursuit of meaningful activities are more likely to engage in behaviors and view experiences in adaptive ways (like Diane in the example above). As a result, these beneficial thought and behavior patterns further reinforce older adults' positive perceptions of aging.

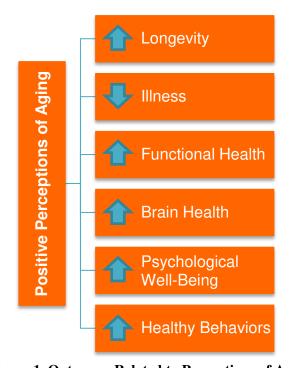


Figure 1. Outcomes Related to Perceptions of Aging

CHANGING PERCEPTIONS OF AGING

Changing perceptions of aging is a challenging issue, because it involves both individual perceptions of aging as well as age stereotypes that are conveyed at societal and cultural levels. Kotter-Grühn (2015) identified several strategies that could be effective at improving perceptions of aging. For example, at a societal level, increasing the presence of older adults in the media and reducing the use of age stereotypes could improve perceptions of aging. In addition, creating more opportunities for intergenerational interactions could help people develop more realistic expectations of aging. Finally, older adults could develop more positive perceptions of aging by learning more about the aging process—correcting misconceptions and increasing awareness of positive age-related changes (Kotter-Grühn, 2015).

Changing older adults' expectations related to aging can lead to important behavioral changes. Here are two examples of research studies that increased physical activity in older adults through an intervention designed to improve their perceptions of aging:

Example 1. Older adults completed a four-week course designed to change their expectations that people become less active with age (Sarkisian, Prohaska, Davis, & Weiner, 2007). Instructors taught that sedentariness is not a natural part of aging and there are things that the participants can do to control their physical activity levels. Participants also attended an exercise class after each meeting. Three weeks after the last session, participants reported more positive expectations about aging and they also walked approximately 2.5 miles more each week (compared to before the course). In addition, participants reported decreases in limitations to activities of daily living and increases in mental health.

Example 2. This study expanded upon a typical physical activity intervention by adding in two behavior change techniques aimed at changing perceptions of aging (Wolff, Warner, Ziegelmann, & Wurm, 2014): (1) research-based information on common misconceptions about aging and the connection between positive perceptions of aging and health outcomes; and (2) guidance on how to recognize and counter negative automatic thoughts. Participants who completed this intervention displayed more positive views of aging (e.g., greater satisfaction and optimism related to aging) and increases in physical activity compared to other participants who completed a standard physical activity intervention or who spent time volunteering (the control condition).

CHANGING PERCEPTIONS IN YOUR COMMUNITY

When developing or implementing a program to encourage healthy behaviors, it is important to consider how older adults' perceptions of aging may influence their thoughts and behaviors. Based on the research described above, here are four recommendations for how to promote more positive perceptions of aging during programs for older adults:

If negative perceptions of aging are preventing people from enrolling in programs, positive aging messages may need to be conveyed in recruitment materials or earlier.

- 1) Identify older adults' age-related expectations about their ability to complete or benefit from the program. How do the expectations of people with positive perceptions of aging differ from people with more negative views? Keep an eye out for differences in feelings of control and beliefs about the possibility of change.
- 2) Develop communications to counter negative perceptions of aging. Start by focusing on the gap between the positive and negative expectations. Is accurate information needed? Do you need to encourage different patterns of thought? Keep the message targeted to information relevant to the specific healthy behavior that is being promoted.
- 3) Incorporate the message into your program. If negative perceptions of aging are preventing people from enrolling in programs, positive aging messages may need to be conveyed in recruitment materials or earlier.
- 4) Measure the effectiveness of the message. If possible, assess key program outcomes before and after introducing the positive aging messages. Depending on the program, outcomes could include enrollment rates, completion rates, behavior change, attitude change, knowledge attained, and satisfaction levels.

People are often unaware of the extent to which their views of aging shape their expectations and actions. Creating more positive perceptions of aging can motivate people to engage in healthy behaviors. The benefits gained as a result of these healthy behaviors further reinforces positive perceptions of aging and encourages people along the path to wellness.

REFERENCES

Kotter-Grühn, D. (2015). Changing negative views of aging: Implications for intervention and translational research. *Annual Review of Gerontology & Geriatrics*, *35*, 167-186.

Levy, B. (2009). Stereotype embodiment: A psychosocial approach to aging. *Current Directions in Psychological Science*, *18*, 332-336.



- Levy, B. R., Ferrucci, L., Zonderman, A. B., Slade, M. D., Troncoso, J., & Resnick, S. M. (2016). A culture–brain link: Negative age stereotypes predict Alzheimer's Disease biomarkers. *Psychology and Aging, 31*, 82-88.
- Levy, B. R., & Myers, L. M. (2004). Preventive health behaviors influenced by self-perceptions of aging. *Preventive Medicine*, *39*, 625-629.
- Levy, B. R., Slade, M. D., & Kasl, S. V. (2002). Longitudinal benefit of positive self-perceptions of aging on functional health. *Journal of Gerontology: Psychological Sciences*, *57B*, 409-417.
- Levy, B. R., Slade, M. R., Kunkel, S. R., & Kasl, S. V. (2002). Longevity increased by positive self-perceptions of aging. *Journal of Personality and Social Psychology*, 83, 261-270.
- Moser, C., Spagnoli, J., & Santos-Eggimann, B. (2011). Self-perception of aging and vulnerability to adverse outcomes at the age of 65-70 years. *The Journals of Gerontology, Series B: Psychological Sciences and Social Sciences*, 6, 675-680.
- Robertson, D. A., Savva, G. M., King-Kallimanis, B. L., & Kenny, R. A. (2015). Negative perceptions of aging and decline in walking speed: A self-fulfilling prophecy. *PLoS ONE, 10*, e0123260. doi:10.1371/journal.pone.0123260
- Sargent-Cox, K. A., Anstey, K. J., & Luszcz, M. A. (2014). Longitudinal change of self-perceptions of aging and mortality. *Journals of Gerontology, Series B: Psychological Sciences and Social Sciences*, 69, 168-173.
- Sarkisian, C. A., Prohaska, T. R., Davis, C., & Weiner, B. (2007). Pilot test of an attribution retraining intervention to raise walking levels in sedentary older adults. *Journal of the American Geriatrics Society*, *55*, 1842-1846.
- Wolff, J. K., Warner, L. M., Ziegelmann, J. P., & Wurm, S. (2014). What do targeting positive views on ageing add to a physical activity intervention in older adults? Results from a randomised controlled trial. *Psychology & Health*, 29, 915-932.
- Wurm, S., & Benyamini, Y. (2014). Optimism buffers the detrimental effect of negative self-perceptions of ageing on physical and mental health. *Psychology & Health*, 29, 832-848.
- Wurm, S., Tesch-Römer, C., & Tomasik, M. J. (2007). Longitudinal findings on aging-related cognitions, control beliefs, and health in later life. *Journal of Gerontology: Psychological Sciences*, 62B, 156-164.



Self-Fulfilling Prophecy: How Perceptions of Aging Affect Our Later Years

Wurm, S., Tomasik, M. J., & Tesch-Römer, C. (2008). Serious health events and their impact on changes in subjective health and life satisfaction: The role of age and a positive view on aging. *European Journal of Ageing*, *5*, 117-127.

Wurm, S., Tomasik, M. J., & Tesch-Römer, C. (2010). On the importance of a positive view on ageing for physical exercise among middle-aged and older adults: Cross-sectional and longitudinal findings. *Psychology and Health*, *25*, 25-42.