

Successful Aging: De-Bunking the Myths and Viewing Aging From a Developmental Perspective

By: Dudley Tower, Ph.D.

“A Knowledge of the Possibilities Must Precede That of Actualities”
(Edmund Husserl)

The life expectancy of older Americans has increased dramatically in recent decades – increasing at birth from forty-seven years in 1900 to approximately 76 years today (See Appendix 1). The first phase of this improvement in life expectancy resulted from a reduction in infant mortality and childhood death rates. The second phase of increasing life expectancy has occurred more recently, and involves a decline in death rates among middle-aged and older individuals. These most recent advances are due to two factors: people are taking better care of themselves, and science and medicine are taking better care of people (Rowe & Kahn, 1998, pp. 3-5). Currently, over 70% of Americans live beyond retirement age of sixty-five, and many of these people will live well into their eighties and beyond. In fact, some geriatricians have argued that the potential human lifespan could be as long as 120 years in the absence of accident or disease.

What does this increasing life expectancy mean for Americans; both old and young? Are we prepared for this dramatic demographic change – either socially or psychologically? Clearly, even 30 years ago we had no idea there might ever be a large group of people living comfortably for two or more decades beyond retirement. Even Erik Erikson (1982), in his famous model depicting the Major Stages in Psychosocial Development, saw nothing of significance occurring between adulthood and old age (see Appendix 2). But what about this fastest growing segment of our population? What will they do with these additional years? The answer to these questions will depend, at least in part, on what we perceive to be the possibilities.

A New Narrative About Aging in America

As aging Americans, what we do and how we think of ourselves, as well as how other people think about and treat us, is largely regulated by the narrative images we are exposed to in our society about becoming older. Similar to how societal narratives shape our images of masculine and feminine gender, so too are we shaped by society’s narratives concerning how we age. These images are not flattering;

depicting older people as largely sick, experiencing rapid cognitive decline, and a drain on society's resources. What if these existing narratives were largely false -- created out of either fear, ignorance, or desire for material gain? What if these images were based on old research -- that has since been proven incorrect in both its methods and assumptions? What if older people today are different, and even better, than prior generations of seniors upon which many of our observations about the aging process are based?

In order to change both society's and our own personal images of what the aging process is like, we must change the narrative upon which many misconceptions have been based. The existing narratives that we hear and accept about aging reduce us as human beings -- limiting who we think we are, what we think we can do, and the ability to achieve our human potential -- which might only be possible in late adulthood.

The purpose of this paper is to help begin changing the social narrative of what it means to get older. Certainly there are age-related declines that we all experience; either due to disease, neuropathology, disuse, or obsolescence. However, aging is also a developmental process with cognitive functioning not really declining, as prior research would have us believe, but qualitatively changing to become more integrated, complex, and adaptive. In other words, we might be slower to answer questions and solve problems based on so-called facts and externally validated norms, but we are also more likely to approach a problem from multiple perspectives, interpreting it from the standpoint of human motivation, the views of others, and the realities of everyday living. In the emerging body of scientific literature, it is beginning to appear that what we experience as we age is not inevitable cognitive decline, but a re-structuring in our cognitive functioning -- one that is clearly an improvement from prior structures.

The Myths About Aging

Developmental studies comparing the cognitive functioning between age groups began around the turn of the 20th Century. Early studies began with comparing the characteristics of groups of individuals of different ages at one point in time (cross-sectional studies). Inferences from these early studies were that intellectual functioning reached its peak in adolescence, leveled out for some period of time in adulthood, and then rapidly declined as one became older (Schaie, 2005). However, in the late 1920's some developmental psychologists began to realize that cross-sectional, age-comparative, studies did not consider the deterministic variables accounting for human development. They changed their methods and began utilizing longitudinal studies of the same individuals over time -- from early age to older

adulthood. The results of these studies contrasted sharply with the cross-sectional results, often concluding that certain cognitive abilities maintained themselves well into adult life, with some abilities remaining stable into early old age.

What should have been obvious is that cross-sectional data representing age differences can only model change over time in a perfectly stable environment, where there are also no differences between cohorts (a group of people sharing certain distinctive demographic characteristics). The advantage of longitudinal studies “is their ability to furnish information on intra-individual change in contrast to cross-sectional studies that provide information only on inter-individual differences” (Schaie, 2005, p. 138).

Another problem with these earlier studies, including most longitudinal research, is they only recognized certain aspects of cognitive functioning and information processing that could be readily measured – such as verbal and numeric abilities, perceptual speed, spatial orientation, memory, and inductive reasoning. For the purposes of these studies, the manner in which these qualities manifest in each individual were assumed to remain constant as a person ages. With this assumption in hand, the researcher could measure age differences in these specific aspects of cognitive functioning and draw conclusions (positive or negative) about the changes that occur as people age.

But what if there is actually a qualitative difference in cognitive functioning as one ages? In other words, what these early researchers did not consider was that in addition to cognitive decline in certain specific functions, there might also be changes in how an older adult processes information – changes that are actually adaptive and developmental in their nature.

Despite all these flaws in early research methods and assumptions, and new evidence that sharply conflicts with their conclusions, we have maintained to this day certain myths about the aging process in our societal narratives. According to Rowe & Kahn (1998):

“Our society is in persistent denial of some important truths about aging. Our perceptions about the elderly fail to keep pace with the dramatic changes in their actual status. We view the aged as sick, demented, frail, weak, disabled, powerless, sexless, passive, alone, unhappy, and unable to learn – in short, a rapidly growing mass of irreversibly ill, irretrievable older Americans.” (pp. 11-12)

We are now going to explore these myths, using largely the findings from three major longitudinal studies of adult development that shed an entirely different light on the aging process: The Seattle Longitudinal Study, The MacArthur Study, and the

Harvard Study of Adult Development. The MacArthur Study identified six myths associated with growing old that scientific evidence now disputes. We will briefly discuss the following three (Rowe & Kahn, 1998, pp. 11-35).

1. To be old is to be sick
2. The elderly experience an inevitable and rapid cognitive decline
3. The elderly don't pull their own weight

1 – To be old is to be sick

Recently there has been a major shift in the patterns of sickness experienced by aging Americans. In the past, there was a prevalence of acute, infectious diseases. Today, many of these more serious diseases can be either prevented or cured, and now the most prevalent ailments affecting seniors are chronic illnesses -- including arthritis (affecting nearly half of all older people), hypertension and heart disease (affecting nearly a third), diabetes (11 percent), and disorders influencing communication such as hearing impairment (32 percent), cataracts (17 percent), and other forms of visual impairment (9 percent). These chronic illnesses are also declining due to a dramatic reduction in the three important precursors to chronic disease: high blood pressure, high cholesterol levels, and smoking. In fact, 73% of those seniors between the ages of 75-84 report no disability at all, while even after the age of 85, 40% of the population is still fully functional. Dental health is improving as well, with the total percentage of older people having such severe dental problems as to result in no teeth, dropping from 55% in 1957 to approximately 20% today.

However, it is not necessarily the types of illnesses or their frequency that really matter, but how those disabilities affect a person's ability to function. Independence is a term used to describe whether a person can perform their usual activities of care and feeding without assistance. If we look at 65 year-old men, it is likely they will live an additional 15 years, with 12 of those years totally independent. For women, who generally live longer than men, at age 65 they will live 19 more years --14 of those years totally independent. Additionally, the trend in medical technology is to not only produce longer life, but also prolong active life and delay disability, thus increasing the number of independent years even further. For instance, only 5.2 % of older people resided in nursing homes in the mid- 1990's, down from 6.3% as found in a 1982 survey. While this trend in itself is significant, it appears as if this reduction in disability among older people is accelerating.

Clearly the research in recent decades debunks the myth of to be old is to be sick and frail. Disability in older people results from three factors: 1) the impact of disease, or many diseases at once; 2) lifestyle factors, such as exercise and diet; and 3) the biological changes that occur with advancing age – formally known as senescence (Rowe & Kahn, 1998, p. 17). Medical advances are reducing the incidence and severity of disease, and many seniors are making substantive positive

lifestyle changes. There is currently not much one can do about senescence, which seems to be genetically programmed, but it is now obvious that the rate of physical aging is not a matter of genes alone.

2 – The elderly experience an inevitable and rapid cognitive decline

Science confirms that younger people have sharper vision and better hearing, their reaction time is quicker, and they have better short term memory than older people. As a result, some types of learning, especially those that require perceptual speed, physical coordination, and muscular strength become more difficult as we age. In addition, many older adults quite naturally increase their efforts towards maintaining those behaviors that are most adaptive and useful in their given life situation – allowing other behaviors to fall into disuse. For instance, as a person ages and they retire from a normal work environment, they are likely to place a lesser emphasis on competitive interaction, speed of computation, and quickness of thought -- and instead spend time in the development of quality relationships, enjoyment of everyday activities, and self-reflective capabilities. Also, many skills and behaviors acquired in earlier life become obsolete for older adults – especially in an environment of rapidly escalating technological and social change. Given that all these types of changes might be considered normal for an aging adult, there is some scientific confirmation to the idea that seniors tend to lose some degree of cognitive functioning due to senescence, disuse, and obsolescence (Schaie, 2005).

The Seattle Longitudinal Study (SLS) had some very different findings than our more common myths regarding cognitive decline. In the area of cognitive capabilities, the study determined that the earliest observed decline occurs for perceptual speed and numeric facility by age 60, while inductive reasoning, spatial orientation, and verbal memory only show decline by age 67, and verbal ability does not show any decline until age 81 (Schaie, 2005). Moreover, **this decline appears to be lessening with each new generation.**

Offsetting this decline, it is now believed that older adults actually experience a positive development in certain forms of cognitive functioning, stemming from the experiences they have acquired over the course of their lifetimes. These new functions allow seniors to better understand and function with complex processes and societal roles; it makes them more likely to adopt favorable lifestyles; and leads to more flexible response, the appropriate management of stress, and a greater capability for dealing with emotional problems. Additionally, it has also been shown that many of the people who experience cognitive decline as they age can be returned to a level of performance they experienced at least 14 years earlier with appropriate training (Schaie, 2005), and these returned levels of cognitive functioning can be largely maintained, even without further training.

There is good reason to believe that what occurs as a person ages is not a cognitive decline, but a cognitive re-structuring. Most scientific studies, in order to produce publishable results, make the assumption that cognitive functioning presents itself the same, whether the subject is young or old. In other words, the assumption is that there are no major qualitative changes in cognitive functioning and information processing after early adulthood. It is only following this assumption that a comparison can be made and conclusions drawn about the positive or negative nature of the changes observed. However, a cognitive-developmental perspective suggests that there is a cognitive re-structuring as we age. According to Jepson & LaBouvie-Vief (1991, p.3):

“For the young, the emphasis is more likely to be on objective, analytical and literal processes, while for the mature and older adults, it is more likely to be on inner, subjective, psychological, and symbolic processes”

A developmental perspective on aging changes the entire dialogue on cognitive decline. If the cognitive mechanisms of younger people are decided to be the standard by which all other age groups are judged, then yes there might appear to be cognitive decline as we age. But if these cognitive functions continue to grow and develop over a person's lifetime – we might even expect them to become more integrated, multi-perspectival, and complex. And, to this writer at least, it seems that these types of changes describe a higher level of cognitive functioning rather than a lesser one.

3 - The elderly don't pull their own weight

The widespread belief that older people in our society are unproductive is simply incorrect. It is based on the assumption that all paying jobs are productive and all non-paying jobs are unproductive. The MacArthur Study (Rowe & Kahn, 1998) determined that approximately one-third of older persons work for pay, and one-third work as volunteers. The remainder provide many other useful purposes in the form of assistance to family, friends, and neighbors – perhaps allowing others to work more effectively in their own jobs.

Another factor in traditional productivity statistics is that older people are not given an equal chance for paid employment. Mandatory retirement ages, age discrimination, the criteria used in downsizing organizations, incentives for early retirement from pension plans and social security – all serve to reduce the number of older people from the paid workforce.

A major obstacle for those older people who wish to continue working for pay is the inflexibility of employers. Many seniors say they would like to continue working provided they could cut back on their hours, have a more flexible work schedule, and/or work at a more meaningful and interesting job. Therefore shorter hours, scheduling flexibility, and changes in job content could all serve to retain older

people in the paid workforce. However, employers largely continue to resist making these types of changes in the workplace -- often to the detriment of the organizations they serve – because, as the MacArthur Study observed:

“Companies that have emphasized recruitment and retention of older workers confirm that older employees meet or surpass expectations, often bringing the added value of increased insight and experience to the work environment”
(Rowe & Kahn, 1998, p. 35)

In summary, National productivity statistics, which exclude non-paying work, are simply an incorrect measure of productivity in general, while also contributing to the myth that older people are an unproductive burden on our society. Volunteerism and participation in the vast support system that underlies the paid workforce in our society are critical to the workings of our economy. Furthermore, many older people would choose to continue working if they only could. However, mandatory retirement ages, economic incentives and dis-incentives, employer inflexibility, and age discrimination combine to prevent seniors from fully participating in the workforce up to their potential.

If Aging is Not so Bad, Then How Can We Make it Better?

If aging is not as bad as our society’s narratives make it out to be, then is there something we could actually call “successful” or “positive” aging? Two of the three major longitudinal studies cited in this paper (the MacArthur Study and the Harvard Study of Adult Development) have directly addressed the question of what comprises successful or positive aging. In the past, these concepts have been limited by society’s images of successful aging: an older person bouncing grandchildren on their knee or telling them a story, a mature woman knitting by the fire, an older man playing golf, images of cruise ships and fruit drinks. While there is nothing wrong with any of these scenes, together they only present a very limited picture of our aging potential, and they tell us nothing about how we might maximize our enjoyment of these activities. “How” a person can age successfully is the question we will address in the remainder of this paper.

The MacArthur Study (Rowe & Kahn, 1998) determined that successful aging could be heavily influenced by individual choices and efforts, and consisted of at least three components:

- Avoiding disease
- Maintaining high cognitive and physical functioning
- Engagement with life

There is also a hierarchical ordering among these three otherwise independent components of successful aging. The absence of disease and disability makes it easier to maintain mental and physical function, which in turn enables (but does not guarantee) active engagement with life. In addition, or complementary, to these three components the Study (p. 174-175) also discusses the need for an older person to keep interested in outer things, the maintenance and replacement of friendships and social relationships, and the importance of personal characteristics such as a willingness to improve one's education, and self-efficacy (self-mastery: belief in ability to deal with situations in a competent manner).

The Harvard Study of Adult development (Vaillant, 2002), had similar findings with what it found to be the predictors of positive aging. The ability to create close relationships and play were especially significant. It was also found that a subjective sense of good health was more important than objective good health. Also, a good marriage at age 50 was a better predictor of positive aging at 80 than low cholesterol levels at 50 (p. 13), and generativity (taking care of the next generation), commitment, tolerance, and humor seemed to be the key ingredients to a contented, long-lived marriage (p. 124). Adaptation is a characteristic pointed out in nearly all the literature as a requirement of successful aging.

Vaillant observed that participants in the Harvard Study developed a set of more adaptive defense mechanisms as they got older. Non-adaptive defenses such as projection, suppression, passive aggression, and reaction formation are replaced by an attitude that is more forgiving, willing to meet adversity cheerfully, and less prone to take offense and vent frustrations on others (pp. 80-81). Retirement was also looked at in the Harvard Study. According to Vaillant, there are four basic activities that make retirement rewarding: The continual renewal and replacement of one's social network, the re-discovery of play, finding a creative outlet, and the continuation of lifelong learning (p. 224). All of these activities can be found in most Learning in Retirement programs across the nation – OLLI at Furman being a good example.

Wisdom is a word that is often thrown around with regard to aging. Does a person become more wise as they age? "Wisdom consists of multiple facets. Among the more important facets are maturity, knowledge, experience, and intelligence – both cognitive and emotional." (Vaillant, 2002, p. 252). Certainly experience increases with age, but it would also appear that wisdom and coping have much in common. The Harvard Study suggests that coping strategies improve with age (p. 256). Finally, Vaillant suggests that wisdom must involve the toleration of ambiguity and paradox, and "to be wise about wisdom we need to accept that wisdom does – and wisdom does not – increase with age" (p. 256). I think this suggestion is born out as we look around us at those who are aging. Some of them seem to be getting wiser,

while others – perhaps those who are not mentally flexible with a higher tolerance for ambiguity and paradox – are not.

Religion and spirituality is another factor looked at in the Harvard Study. Younger people need more certainty in order to confirm their identity. Religion is often a part of this identity. However, as adults become more mature, many become increasingly tolerant of paradox and ambiguity. An interesting finding from the Study is that neither religion or spirituality had significant association with successful aging. Instead, it was hope and love – rather than faith – that seemed most clearly associated with a maturity of defenses, successful aging, and generativity (p. 259).

Four additional – but very subjective factors – were outlined in the Harvard Study as indicators of successful aging (pp. 305-306):

- Future orientation – the ability to anticipate, to plan, to hope.
- The capacity for gratitude and forgiveness – seeing the glass as half full, and not letting paranoia and injustice destroy old age.
- Being able to imagine the world as it seems to another person – the capacity to love and hold the other empathically, but loosely.
- The desire to do things with people.

Creativity is another interesting variable that is often associated with successful aging. According to Gene Cohen (2000), creativity shifts the focus from “what aging is” to what are the possibilities of aging. Creativity strengthens a person’s attitude in later life because it helps them to adapt to changing life conditions – both conditions in the external environment as well as the inevitable changes that occur physically and psychologically as one ages. Creativity breathes hope and opportunity into what might otherwise be interpreted according to societal myths and the social construction of aging. Creativity actually improves a person’s outlook and fosters a sense of well-being that can relieve the symptoms of chronic illness, improve the immune system, and generate positive emotions.

“Most of us will never win the Nobel Peace Prize or a Presidential election, but we can use creativity to shape our lives and, especially as we age, to unleash new potential for personal growth and self-expression” (p. 12)

Creativity also has many myths associated with its meaning. It is often thought of as a product, whether it is a work of art, or a scientific invention. However, Abraham Maslow (1971) separated creativity into its primary (inspirational) and secondary components, believing that primary creativity is actually a process, not a product. This primary form of creativity allows a person to look at a rapidly changing reality and see beyond the stereotypes, misunderstandings, misconceptions, prejudice, and ignorance about aging – quickly re-formulating existing perceptions and

perspectives to adapt to internal and external change. Ultimately, according to Maslow (1971), the greatest form of creative expression a person can have is their self:

"What I would propose in trying to achieve the creative person is that there could be hundreds and almost literally thousands of determinants of creativeness. That is, anything that would help the person to move in the direction of greater psychological health or fuller humanness would amount to changing the whole person. This more fully human, healthier person would then, epiphenomenally, generate and spark off dozens, hundreds, and millions of differences in behaving, experiencing, perceiving, communicating, teaching, working, etc. which would all be more "creative." He would then be simply another kind of person who would behave in a different way in every respect." (pp. 70-71)

This personal creativity as described by Maslow is probably only possible in later life. A younger person does not really know their own self very well. The task of earlier stages of development is to try on various personas, seeing how each fits, adjusting one's behavior and personality until they have something that works in a given circumstance. Once they become adults the task then switches to raising a family and fulfilling the social roles of father, mother, partner, and career. The emphasis is on external approval, recognition, and acceptance. At mid-life, the focus starts to turn inward. Self-examination reveals the fallacy of living according to others' standards, and we begin to find out what really works for us as an individual. The accumulation of life experiences that can only be achieved through a long life, as well as an emerging existential reality of our own mortality, contribute to a set of conditions that are ripe for personal creativity, meaning, and change.

Conclusions

Each of us, to a certain degree, is a social construction. In other words, we are who we think we are, but that identity we believe to be so unique is influenced tremendously by what other people think of us. If they think we are old, weak, frail, declining mentally, and a drain on society's resources – then we will incorporate those images, to some degree, into our own self-image. The latest scientific evidence does not support the myths we have in our society about aging. In fact, it appears that older people might actually undergo a cognitive re-structuring that is developmental in nature. This re-structuring allows us to be more flexible and adaptive, autonomous, inclusive in our thinking, empathetic, in control of our emotions, accommodating, self-reflective, open to alternative views, and the list goes on and on. Plus, we are at an age where we are staring death in the eye, and this can be wonderfully liberating – to finally live each day knowing there are fewer and fewer left, so we had better get on with it.

The American Psychological Association, along with several other theorists (including myself) have proposed adding a new stage of psychosocial development to Erikson's Model (Appendix 2). This new stage would be inserted between Adulthood and Old Age, to take account for the growing numbers of older adults who are still living vital and fulfilling lives – those who have not accepted our society's myths about aging, folded their tents, and are simply passing time in preparation for death. The crisis (Erikson's term) each older person must address in this stage of their life is whether to accept the societal narrative about aging -- allowing themselves to age, and move onto the next stage, prematurely. Or, to proactively engage with life to its fullest during this period – continuing to grow, discover, learn, enjoy, and help others.

De-bunking society's myths about aging is only the first step. We must also know what successful aging looks like, and what our potential as aging adults really is. Then we have to intentionally and enthusiastically work towards these goals. If we ever think we have stopped growing or developing new capabilities, then we are lost. The three longitudinal studies cited in this paper go a long way towards correcting the myths and describing for us what positive aging might look like. However, aging is not for wimps. There is an inevitable physical decline, decline in certain specific cognitive functions, chronic conditions, pain, and loss we will all have to deal with. This aspect of aging is decidedly not fun, but it is a portion of our life experiences from which we can learn and grow – if we allow ourselves to.

To sum up, it seems that to age successfully we must: hold the correct images of aging in our minds, endure increasing hardship with a positive attitude, do what we can – medically and preventatively – to extend our independent years, live and love like there is no tomorrow, allow our creativity and wisdom to emerge from within us as a natural growth process, help others and especially the next generation to make this world a better place, and perhaps most of all – have a sense of humor.

References

Cohen, Gene D. (2000). *The Creative Age: Awakening Human Potential in the Second Half of Life*. New York: HarperCollins Books.

Eccles, Jacquelynne S. (Ed.) (2005). *Research in Human Development: The Official Journal of the Society for the Study of Human Development – Special Issue: Successful Aging.*, Volume 2, Number 3. Mahwah, NJ: Lawrence Erlbaum Associates.

Erikson, Erik H. (1982). *The Life Cycle Completed*. New York: W.W. Norton & Company.

Jepson, Kathryn L. & LaBouvie-Vief, Gisela (1991). *Symbolic Processing in the Elderly*, a chapter prepared for West, R.L. & Sinnott, J.D. (Eds.) (in preparation). *Everyday Memory and Aging: Current Research and Methodology*. Springer-Verlag.

Maslow, Abraham H. (1971). *The Farthest Reaches of Human Nature*. New York: Penguin Books.

Rowe, John W. & Kahn, Robert L. (1998). *Successful Aging*. New York: Dell Publishing.

Schaie, K. Warner (2005). *What Can We Learn From Longitudinal Studies of Adult Development?* In Eccles, Jacquelynne S. (Ed.) *Research in Human Development: The Official Journal of the Society for the Study of Human Development – Special Issue: Successful Aging.*, Volume 2, Number 3, pp. 133-158.

Vaillant, George E. (2002). *Aging Well*. Boston: Little, Brown and Company.

Successful aging results from a fit between personal capacities and environmental demands. Individuals are proactive in selecting and shaping their environments in accordance with personal goals, needs, and capacities in order to obtain positive aging outcomes related to well-being and health. In line with this we proposed an optimality norm as a process-oriented criterion of successful aging.