

Name: _____ Class: _____

What's Your True Age?

You may be a lot younger than you think

By Susan Krauss Whitbourne, Ph.D.
From Psychology Today • 2012

According to Susan Krauss Whitbourne, Ph.D., chronological age—your age on a calendar—is just one way of determining a person's "true age." As you read the article, consider who the intended audience might be and the author's purpose for writing this article.

- [1] If you want to know your true age, don't look at the calendar. The calendar tells you what your chronological age is, but this number may be far from accurate in defining who you are. All you know from your chronological age is how many times you've sat on the earth while the earth orbits around the sun. As an index of aging, chronological age is deeply flawed.

Psychologists who study aging long ago dispensed with the value of chronological age as a variable to use in research. For one thing, it's not an "independent" variable because it can't be experimentally manipulated. Participants can't be randomly assigned to conditions. Researchers

can't say to a 30-year-old participant: "I'd like you to be 60 years old today for our experiment on aging and you're in the middle-aged adult condition." Studies on aging can never be experimental because there is no way to compare the "treatment" with the "control" group. Without this ability to assign people randomly to conditions, it's not possible to determine cause and effect. The 30-year-olds might perform differently because they're younger than the 60-year-olds but their performance may differ for many other reasons as well such as having been born in different generations.

All of this is a problem for researchers, but why should it bother you? For one thing, if the research evidence on aging isn't experimentally-based, how will you know which advice to follow when you're trying to live a healthy life? At a more personal level, the fact that you can't rely on chronological age means that the number you jot down on a loan application or government form requiring your age is much more arbitrary than you've been led to believe. Birthday cards to the contrary, turning 30 doesn't make you a different person than you were the day before, when you were 29 years old and 364 days. Even though most of realize the arbitrariness of age, we still place a great deal of stock in it especially when we reach those infamous decade markers. And without that number to define our years of existence on the planet, what would we use in its place when someone asks us our age?



"Where the Boys Are" is licensed under CC BY SA 2.0.

I'll get to that answer shortly. But first I'd like to show you why so many of us hold onto chronological age to define who we are. Perhaps the biggest reason is that industrialized societies such as our own measure productivity in terms of time. Agrarian societies kept track of time by referring to markers in the seasonal variations of the sun, moon, and planets. As society became industrialized, people increasingly relied on clocks to set the pace of work. Age then became part of that industrialized system. Atomic clocks that measure the tiniest fraction of a second give us no respite from time's arrow.

- [5] Just as age and time become woven into our society's fabric, so too is the way that society defines each of us in terms of this magic number. Did you ever notice that the first piece of information in a news article or even wedding announcement, right after the name, is the age? If you'd rather your neighbors didn't know your exact age, you better be sure not to get involved in a jaywalking accident or fender bender. Your age will follow your name, and there's no way around that. With age such a crucial feature of a person's identity that we tag everyone from newlyweds to traffic scofflaws with it, it's no wonder that you feel you'd float off into a cloud if you couldn't hang onto this defining feature of your very being.

Yet, age is not a very good indication of very much about a person. Think of the older-than-her-years hypermature 15-year-old who could easily pass for 22. How about the older adult who lives down the street from you whose sprightly step would rival that of someone 40 years her junior? In thinking about yourself, as Satchel Paige once said, "How old would you be if you didn't know how old you was?" It's time to throw aside this overly narrow and imprecise measure of your identity. If you're willing to give up the grip that age has over your self-image, then you're ready to move on to the next step, which is to calculate your true age. As it turns out, your true age will not be a simple number but will be a combination of where you stand along three dimensions. These three dimensions are your functional ages. The three functional ages represent your biological age, your psychological age, and your social age. We'll take these one at a time.

Biological Age

Your functional biological age is the age of your body's systems. Given the complexity of the many interacting parts of our physiological make-up, this isn't a simple number to calculate. To start, it would be helpful to know certain numbers, such as your blood pressure, respiratory capacity, aerobic power, and blood glucose levels. Age changes in your cardiovascular, respiratory, and endocrine systems occur at a predictable rate with age (about 1% a year after age 30-40), and so if you're under 1% then you're beating your chronological age. Very few people actually know all of these numbers, or even have the ability to get accurate measures, however. For example, to calculate your lung age requires that you use a spirometer—an instrument that actually measures your lung's functioning. Instead, you can substitute answers to questions about your lifestyle such as the Living to 100 Life Expectancy Calculator developed by Dr. Thomas Perls of the New England Centenarian Study. If you exercise regularly, for example, you can cut down the loss of such key biological functions as aerobic capacity, muscle strength, and immune functioning by as much as 50%. That will make your biological age at 60 chronological years at closer to 50.

You can also estimate your biological age with a relatively simple method that, though crude, may provide you with some ideas about what's going on inside of you and what you need to fix. This simple measure is your height. You've probably heard it said that people "shrink" with age. Loss of height occurs in many people due to loss of bone density, which causes the vertebrae to compress. The height loss due to bone loss becomes a measure, then, of biological age. You can lose as much as half an inch every 10 years after the age of 40. However, exercise using resistance training can lower the rate of bone loss, and therefore keep your bone age younger than it would otherwise become. Some of the factors that contribute to biological age are less obvious, such as the ability of your kidneys to clean toxins from the body. However, if you're exercising regularly, even your kidneys will age less rapidly. Embarking on a program of regular exercise, control of your diet, and avoidance of bad habits may not cause the progression of your biological calendar to stop completely, but these behavioral controls will slow it very substantially.

Psychological Age

Your psychological age can be broken down into cognitive functioning—your abilities to learn and remember—and emotional functioning—your ability to handle and manage your feelings. As people get older they tend to have more difficulty with some aspects of memory, so to keep a younger psychological age requires that you beat these memory problems. On the other hand, people's abilities to cope with negative emotions improve as they get older. To stay younger would mean that you have more of those emotional highs and lows that can make your life more chaotic. When it comes to your emotional age, being older actually has many benefits.

- [10] Let's start with memory. Your psychological age is a direct function of how well you can use your brain to handle the cognitive load you put on yourself. Perhaps you feel that your memory is slipping compared to how it used to be. You go into a room and forget what you were looking for. You're at the grocery store see that you don't have your list and can't, for the life of you, recall what you're supposed to be buying. "Uh-oh," you say, "I'm having a senior moment!" To keep your psychological age younger, throw that expression out of your vocabulary. A senior moment will only happen if you think it will. Once you start to label your memory as getting worse, you increase the chances that it will go downhill. Instead of attributing your occasional brain freezes to aging, look at all the other factors that could be influencing you such as stress, anxiety, or even worries about getting older and getting Alzheimer's disease. We're so hyped by the media to blame minor memory problems on this dreaded illness that, if you're not careful, these occasional lapses become self-fulfilling prophecies.

Once you set aside the myths from the reality of memory changes with age, you can move on to estimate objectively this component of your psychological age. It is possible that it takes you longer to react and process new information than it used to, because this is one of the most significant age-related changes in mental functions. It's difficult to put a number on exactly how much you can expect your mental acuity to slow, particularly if you can't put your mind to the test in a computerized lab. However, your brain requires oxygen to function, and we know that aerobic capacity, which reflects how much oxygen reaches your brain, declines at about 1% a year. You can figure that your cognitive abilities will decline at a similar rate, all other things being equal, particularly if you don't freak out about small memory slips. So your memory at age 60 would be 20% worse than it was at age 40, if we apply this rule.

Here's where you can intervene and keep this feature of your psychological age as young and healthy as possible. Just as exercise can train your body and lower the rate of physical decline, it can also lower the rate of cognitive decline. Once you start to exercise, your mental abilities will be less likely to deteriorate and may even take a turn for the better. Your psychological age clock can slow, perhaps by as much as 50%, with a regular program of physical activity. Conversely, if you become convinced that you're getting "senile" (a terrible word!), you can accelerate your psychological aging clock.

You may want your psychological age to be young when it comes to memory, but when it comes to your emotions, you're actually better off being older. We know from extensive studies in the psychology of aging that older adults are truly "wiser," in that they can better control their temper, take negative situations and spin them in a positive light, and get along more easily with other people, even people they don't particularly like. With an older emotional age, you'll actually increase your chances of maintaining a younger psychological age overall. With less stress from unpleasant situations, you'll free up your mental resources to handle your cognitive problems more effectively. The overall result is a net slowing of the psychological calendar.

Social Age

Your social age reflects your position along the so-called "social clock" of life. The social clock is based on the set of expectations that people in a given culture have about when life's major events "should" occur. We can divide the social clock into the two major areas of life: family and work. The family social clock of our culture expects that people become parents at some point in their late 20s or early 30s, at which point they also are married or in a serious relationship. We become grandparents, according to this clock, in our 60s, reflecting the fact that our children are following a similar social clock. The work social clock says that we graduate from high school in our late teens, and then from college a few years later, at which point we start our career. We retire in our 60s, and at that point the work social clock stops ticking.

- [15] Now that you know the age markers on the social clock, you can calculate your own social age. If you've hit all those age points at the expected times, then your social age will equal the ages at which those points are set. You're 65, according to the social clock, when you retire. However, depending on how your life evolves, your social age may be much younger or older than the norm. You can become a parent for the first time in your late 30s or early 40s (or later) and so you have now deducted at least 10 years from your social age. You can retire at age 25 if you happen on some good luck at the lottery or are in a job that people typically leave at a young age, such as high-intensity sports. Your social age then becomes 65.

People can speed up or slow down their social clock at dizzying speeds. In some cases, the social clock is set by biology in that, for most women, it's impossible to have a child after a certain age. Biology also forces certain athletes to leave their profession at a relatively young chronological age. However, with that caution in mind, you have a great deal of freedom to determine your own social age. If you are an older parent, your young social age might also affect your psychological age. Being the parent of teenagers may automatically keep you younger, just by virtue of your exposure to the youth culture. If your emotional age is older, that might even help you handle the stress of raising an adolescent. At work, changing career paths can also keep your social age young. Given that we're expected to be in the opening stages of our career in our 20s, should you change directions in our 40s, you now have deducted 20 years from your work-based social age.

By knowing that you don't have to define yourself in terms of the social clock, you can feel better about breaking its expectations. There's no need to feel embarrassed about being the oldest person in your night school class if, by doing so, you're getting ready to reboot your job trajectory.

Finally—The Age That Really Matters

How did you rate along these three dimensions of functional age? How much do they agree and how do they relate to your chronological age? Now you can take one more test of your age, a test that may be the best of all. Ask yourself this very simple question: How old do you feel? Forget what the calendar says, and even forget what your functional ages are. The age you feel may very well be the most important factor determining your health, happiness, and longevity. In my research on physical changes and identity, I've consistently found that the people who are happiest and best adjusted in their middle and later years are the ones who don't focus on their limitations, worry about their memories, or become preoccupied with whether others view them as old. Being able to subtract a few years from this subjective age, or age that you feel, may actually buy you a few more objective years of healthy and productive life.

© 2012, Susan Krauss Whitbourne, Ph.D.. All rights reserved. Reprinted with permission.

Text-Dependent Questions

Directions: For the following questions, choose the best answer or respond in complete sentences.

1. Why can't experiments be done on the study of aging? Explain what this means. Cite [RI.3] evidence from the text to support your answer.

2. According to the author, why do "industrialized societies" care about our age? Support [RI.2] your answer with evidence from the text.

3. List three ways you can measure a person's biological age. Support your answer with [RI.2] evidence from the text.

4. According to the text, how is a person's psychological age broken down? Cite evidence [RI.1] from the text to support your answer.

5. In your own words, define "social age." Support your answer with evidence from the text. [RI.4]

6. According to the author, how can you determine a person's "true age"? [RI.2]

7. Who is the intended audience for this article? How do you know? [RI.6]

8. What is the author's purpose for writing this article? [RI.6]

Discussion Questions

Directions: Brainstorm your answers to the following questions in the space provided. Be prepared to share your original ideas in a class discussion.

1. The author says the best indicator of age is how old we “feel.” How old do you feel? Explain your answer.
2. According to this article, at what point are you “grown up”? Do you agree or disagree? Explain.