

# This Stanford Scientist Can Make You Feel And Think Younger: Interview With Dr. Laura Carstensen

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Have you ever wondered about aging and how to stop it? Would you like to do something about it? Regardless of where you are in life it is [worthwhile](#) learning about the field of geroscience and staying atop of the news and recent developments. I have been studying aging for over 17 years, and looking back I can say with confidence that the progress in the biology of aging and even in longevity medicine is rapidly accelerating. Since 2010 we saw a revolution in aging biomarkers dubbed [“aging clocks”](#), [senolytics](#), [NAD+ boosters](#), [rapalogs](#), cellular reprogramming, gene therapy, and many other fields. However, there is one exciting field that remains largely unnoticed and untouched by the media – the psychology of aging.

Yes, we do age on the psychological level. Life events such as graduation, marriage, birth of a child, age-related disease, retirement, have serious implications on our psychology, behavior, our values and principles. To serve our evolutionary purpose, we need to come into this world, grow, reproduce, take care of our young, pass our knowledge and resources, and gracefully decline and die. In his comedy [“As You Like It”](#) Shakespeare provided the most poetic depiction of this process ending with “... [second childishness](#) and mere oblivion, sans teeth, sans eyes, sans taste, sans everything”. Thousands of years of evolution ensured that when we pass the years of our peak performance, and start losing on all fronts, we adjust, accept the inevitable, and continue living our lives until the end.

One of the authorities in the field of psychological aging is [Dr. Laura L. Carstensen](#), Fairleigh S. Dickinson Jr. Professor in Public Policy, Professor of Psychology, and founding Director of the Stanford Center on Longevity. I first learned about Dr. Carstensen’s work many years ago while listening to a [podcast by Dr. Gerald Cizadlo](#) (Doc C), which I accidentally clicked on while listening to his lectures on pathophysiology. While I published my own book on aging around the same time, I found his lectures very entertaining and do recommend them to everyone regardless of their level of experience.

Dr. Carstensen’s theory briefly covered in Doc C’s lectures is called socioemotional selectivity theory. My takeaway from this theory in two very simple sentences: our longevity horizons impact our behaviour. The longer you expect to live, the younger you are going to behave and vice-versa.

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**Dr. Zhavoronkov:** Dr. Carstensen, you are one of the undisputed leaders in psychology of aging and can you please tell us about your work on your main scientific contributions?

**Dr. Carstensen:** Sure. I have been studying motivation and emotion for about thirty years now and using empirical evidence to develop and then test a theoretical framework that I have offered in the field called socioemotional selective theory. The core postulate of socio-emotional selectivity theory is that time horizons have powerful influences on people’s goals and motivation. And prior to this work I think

the idea that the time horizons could account for age differences was not something people thought about very much. What we have shown empirically is that we can shift the preferences of younger people to look like those of older people when they perceive time horizons is relatively short, and we can generate preferences in older people that resemble younger people when we expand their theoretical time horizons.

This has been important theoretically because most work on aging considers chronological age as the main yard stick by which we study aging, that is the number of years since you were born. What socio-emotional selectivity theory suggests is that the amount of time you perceive as having left, may be as important – and in some cases more important – than the number of years since you were born.

**Dr. Zhavoronkov:** I don't think I actually read a summary put together like this to date, so thank you. And I'm just wondering, so kind of continuing on this topic. How do you shift one's time horizons to achieve this empirical evidence, to obtain this empirical evidence?

**Dr. Carstensen:** Good question. It was the first challenge we faced when we began theoretical and empirical work in this area. We began one study by using age as the benchmark for time horizons. We developed a measure of future time horizons and not surprisingly the amount of time people perceive left in life is highly correlated with chronological age, not a perfect correlation though It's about .7, so there are individual differences in perceptions of the future. But it would have been surprising had we found that chronological age wasn't in any way related to how much time people think they have left in life. So we then developed an experimental paradigm to assess goals as a function of time horizons. We ask people to make a choice from among three different social partners that represent different goals. We did a lot of preliminary work using multi-dimensional scaling and card sorting and categorization tasks to identify social partners who represent different kinds of goals and preferences. So a member of your immediate family, for examples, represents an emotionally meaningful contact for people, but it's relatively low in information because you know that person very well. The author of a book you just read would be someone high in information value, but relatively low in emotional significance. An attractive stranger is someone who offers future potential more so than immediate gratification. This person holds future promise.

We wanted to see if older people display preferences that represented different goals than younger people displayed. We maintain that when time horizons are relatively short, people focus on emotionally meaningful goals. They want to invest their time in doing things where the reward from the activity comes from the activity itself. So if I spend time with you because I enjoy spending time with you, I'm not banking the experience to pay off in the future. If I'm talking with you because I think you might help me get a job sometime in the future, that's a different kind of a goal, right? So we developed this paradigm and tested preferences for an array of social partners (who represented different types of goals).

We hypothesized that because older people perceive shorter time horizons than younger people, they would prefer emotionally meaningful partners. That's what we found. They showed a strong preference for spending time with a member of their immediate family. Whereas younger people's preferences were evenly distributed across those three options, an attractive stranger, author of a book you just read, most meaningful person.

