## Why Relationships Are the Key to Longevity

Fostering and maintaining close friendships can help keep your brain healthier as you age.

BY KARIN EVANS SEPTEMBER 17, 2018

Plenty of exercise. Healthy food. Positive attitude. Plain old good luck. There's lots of advice out there about how to keep body and brain in optimal shape as the years roll by.

But Louis Cozolino, professor of psychology at Pepperdine University, is deeply engaged with another idea. In his book <u>Timeless: Nature's Formula for Health and Longevity</u>, he emphasizes the positive impact of human relationships.

"Of all the experiences we need to survive and thrive, it is the experience of relating to others that is the most meaningful and important," he writes.

His thinking grows out of the relatively new field of interpersonal neurobiology, based on the recognition that humans are best understood not in isolation, but in the context of their connections with others. Our brains, Cozolino writes, are social organs, and that means that we are wired to connect with each other and to interact in groups. A life that maximizes social interaction and human-to-human contact is good for the brain at every stage, particularly for the aging brain.

Since the publication of Cozolino's earlier book, *The Neuroscience of Human Relationships*, the field of social neuroscience has expanded tremendously. We now know that people who have more social support tend to have better mental health, cardiovascular health, immunological functioning, and cognitive performance. The well-known, long-running Harvard Medical School Nurses' Health Study was one of the early studies to reveal how being socially integrated can lead to greater health, life satisfaction, and longevity over time.

Researchers who conducted <u>another study</u>, one involving nearly 7,000 people over a nine-year period, found that those with more social ties tended to live longer regardless of their socioeconomic status, smoking, drinking, exercise, or obesity. The mortality rate of men with the fewest ties was 2.3 times that of men with the most ties, the researchers found, while the mortality rate of women with the fewest ties was 2.8 times that of women with the most ties.

One explanation is that social relationships help calm our stress-response system. While chronically high levels of the stress hormone cortisol wreak havoc on our physical and

emotional health, experiencing safe and supportive social relationships <u>has the opposite</u> <u>effect</u>, keeping our stress-response system in check. In <u>a study</u> of elderly Hong Kong residents, researchers found that those who spent more time cultivating social relationships had a significant drop in cortisol levels during the day, which could explain why positive relationships help us learn better, stay healthier, and live longer.

In <u>a long-range study</u> conducted by David Snowden on Catholic nuns from the School Sisters of Notre Dame—a group he found intriguing because of their unusual longevity and low incidence of dementia—Snowden found that positive emotions played an important role in their healthy aging. As positive emotions <u>are part</u> of warm, loving social relationships, and the nuns lived in such a close-knit community, Cozolino speculates that the Sisters' unusually strong social connections may have contributed to their living well into old age.

"How we bond and stay attached to others is at the core of our resilience, self-esteem, and physical health," Cozolino writes. "We build the brains of our children through our interaction with them, and we keep our own brains growing and changing throughout life by staying connected to others."

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## The brain across your lifespan

Cozolino's book is far-reaching, covering many aspects of brain development and the impact of human connection, from the prenatal stage and infancy to adolescence and adulthood to the end of life. We learn that the way the brain processes information <u>changes</u> to meet the needs of each life stage.

As we grow older, what's lost in quick recall and short-term memory is balanced by an ability to reflect and to hold multiple perspectives, Cozolino argues. Neurological changes in the aging brain may contribute to emotional regulation and an increased ability to relate compassionately to others. That's partly because the effects of fear and anxiety on the brain tend to lessen as people grow older, enabling them to see social situations with less defensiveness and more clarity, the author says.

Since the human brain is almost endlessly adaptive throughout the life cycle, change is as possible for older people as for infants. New neurons continue to grow in the brain until the end of life, and scientists have begun looking at the brains of older adults who are leading active and productive lives to find out why they are so healthy.

For example, many healthy older adults show no signs of significant brain volume loss past 100 years of age, says Cozolino. What's their secret? The answer comes right back to Cozolino's conviction: People who lead extraordinarily long lives are those who have maintained close ties to others. Centenarians, he writes, tend to be more extraverted and have higher morale, indicative of reaching out to others, giving and receiving support, and maintaining attachments.

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In his observations about successful agers, Cozolino is particularly interested in the qualities of wisdom and <u>compassion</u> that tend to emerge as the human brain changes over time. Although he doesn't pinpoint studies for every assertion, and admits that wisdom can be a hard quality to pin down, he concludes that "much of wisdom is expressed in how people interact with and treat one another." He offers his own personal experiences with wise elders along the way, making the case for the positive influence that affectionate, supportive older people can have on younger people.

When it comes to practical advice, Cozolino points out ways that older people can maintain those important connections. Those who are grandparents have a clear opportunity to nurture their grandchildren, help that is sorely needed in this day and age. For others, volunteering in various capacities can foster healthy relationships. Not only are such connections good for aging people themselves, Cozolino says, they are beneficial for society as a whole.

He writes, "Instead of putting our elders out to pasture, we might learn to harness the experience, affection, and time they have to offer."

This article was adapted from <u>Greater Good</u>, the online magazine of UC Berkeley's Greater Good Science Center, one of Mindful's partners.