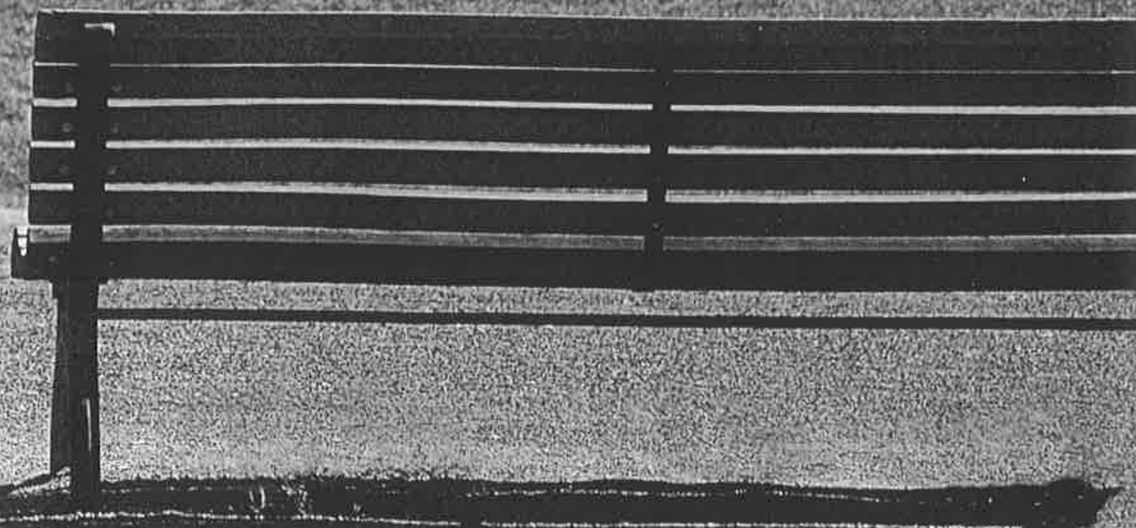
Friends wanted

New research by psychologists uncovers the health risks of loneliness and the benefits of strong social connections.

BY ANNA MILLER • *Monitor* staff

To watch John Cacioppo's TEDxTalk, "The Lethality of Loneliness," go to http://tedxtalks.ted.com/video/The-Lethality-of-Loneliness-Joh



It took a trip to the hospital for Cathryn Jakobson Ramin, 56, to confront a nagging concern she'd had for years: She had no friends. "I didn't have one person who could pick me up," says the journalist in Mill Valley, Calif., who went to the hospital for a small medical procedure.

Ramin does have many friends — those she first met in childhood and in the four cities she's lived in as an adult — but they don't live nearby anymore. She also has a strong marriage, two grown sons and a successful career. But she has few local friends she can call on in a time of need — or for simple companionship.

"I like the sense of sitting in someone's kitchen with a cup of tea and cookies and just shooting the [breeze]," she says, admitting she feels a void. "That to me is a very important part of life."

Psychologists agree. While research on relationships has skirted adult friendships — tending to focus on adolescent friendships and adult romances — the importance of strong social connections throughout life is gaining scientific clout, having been linked with such benefits as a greater pain tolerance, a stronger immune system, and a lower risk of depression and early death.

"For years and years ... people speculated that if you felt alone or you lived alone or you were alone a lot, you wouldn't eat good meals, you wouldn't exercise as much, nobody would take you to the doctor," says Laura Carstensen, PhD, who directs Stanford University's Center on Longevity. "But I think what we're learning is that emotions cause physiological processes to activate that are directly bad for your health."

Yet forging platonic relationships isn't always easy. Ramin's situation appears to be increasingly common: According to a meta-analysis with more than 177,000 participants, people's personal and friendship networks have shrunk over the last 35 years (*Psychological Bulletin*, 2013).

Combine that trend with the United States's rising age of first marriage, a divorce rate nearing 50 percent and a life expectancy that's at an all-time high, and you get "a demographic shift such that there are now [more] people who don't have a marital partner to supply the intimacy they need," says Beverley Fehr, PhD, a social psychologist at the University of Winnipeg and author of the 1996 book "Friendship Processes." "In light of those shifts, I think that friendships are more important today than ever before."

The most "biologically toxic" aspect of loneliness is that it can make you feel chronically threatened, an emotion that can wear on the immune system.

I'm so lonesome I could die

A lack of friends isn't simply an inconvenience when you want a movie partner or a ride to the hospital. A sparse social circle is a significant health risk, research suggests. In one meta-analysis of 148 studies comprising more than 308,000 people, for example, Brigham Young University psychologists found that participants with stronger social relationships were 50 percent more likely to survive over the studies' given periods than those with weaker connections — a risk comparable to smoking up to 15 cigarettes a day and one double that of obesity. And the risks of poor relationships are likely greater, the researchers say, since the studies didn't look at the quality of participants' social connections (*PLOS Medicine*, 2010).

There's some evidence that more really is merrier. In one recent study tracking 6,500 British men and women ages 52 and older, psychologist Andrew Steptoe, PhD, of the University College London and colleagues found that both feeling lonely and being socially isolated raised the risk of death. However, only social isolation — measured in terms of frequency of contact with family and friends, and participation in organizations outside of work — appeared to be related to increased mortality when the researchers adjusted for demographic factors and baseline health (*PNAS*, 2013).

But contrary to Steptoe's findings, most research indicates that *feeling* isolated is more dangerous than *being* isolated, says psychologist John Cacioppo, PhD, co-author of the 2008 book "Loneliness: Human Nature and the Need for Social Connection." In one 2012 study, he and colleagues looked at data from more than 2,100 adults ages 50 and older and found that feelings of loneliness were associated with increased mortality over a six-year period. The finding was unrelated to marital status and number of relatives and friends nearby, as well as to health behaviors such as smoking and exercise (*Social Science and Medicine*, 2012).

"It's not being alone or not" that affects your health, Cacioppo says. "You can feel terribly isolated when you're around other people."

In his ongoing Chicago Health Aging and Social Relations Study, funded by the National Institute on Aging, Cacioppo and colleagues have also linked loneliness with depressive symptoms and an increase in blood pressure over time.

Other research indicates positive social connections might accelerate disease recovery. In a study of 200 breast cancer survivors, psychologist Lisa Jaremka, PhD, and colleagues at the Ohio State University found that lonelier women experienced more pain, depression and fatigue than those who had stronger connections to friends and family. The more disconnected women also had elevated levels of a particular antibody associated with the herpes virus — a sign of a weakened immune system (*Psychoneuroendocrinology*, 2013).

Particular genes may play a role in explaining why our bodies are so attuned to our social lives, says psychologist Steve Cole, PhD, at the University of California, Los Angeles. In one study, he and colleagues including Cacioppo analyzed the gene expression profiles of chronically lonely people and found that genes expressed within two subtypes of white blood cells are uniquely responsive to feelings of loneliness. The cells — plasmacytoid dendritic cells and monocytes — are associated with diseases such as atherosclerosis and cancer, as well as "first line of defense" immune responses (*PNAS*, 2011).

Cole says the most "biologically toxic" aspect of loneliness is that it can make you feel chronically threatened, an emotion that can wear on the immune system. "It's really that sense of unsafe threat, that vague worry, that's probably what's actually kicking off the fight-or-flight stress responses that affect the immune system most directly," he says.

Friends in adulthood

As researchers work to better understand the link between friendships and health, they're also helping to answer a question familiar to anyone who's ever moved to a new city, lost a spouse or otherwise found themselves feeling alone: How do you make friends as an adult? Here's what the research suggests might work:

• **Be a familiar face.** The idea that familiarity breeds attraction is long-established by research, and was again supported in a 2011 study led by psychologist Harry Reis, PhD, at the University of Rochester. In the first experiment, same-sex strangers rated how much they liked one another after having several structured conversations. In the other, strangers chatted freely online. In both cases, the amount participants liked their partners increased with each exchange (*Journal of Personality and Social Psychology*, 2011).

Rachel Bertsche, a writer in Chicago, witnessed this phenomenon outside of the lab when she joined a weekly comedy class a few years ago. At first, she thought her classmates were strange. But she gradually changed her mind — and soon wound up joining the group for drinks after class. "Consistency is so important," she says.

Fehr agrees. She says sticking to a simple routine — whether it's going to the same coffee shop at the same time every day, joining a class like Bertsche or even just going to the office mailroom when it's most crowded — can help turn strangers into friends.

Why psychologists need friends

Friends are important, no matter who you are. But psychologists' careers may depend on friendship, says Brad Johnson, PhD, a professor of psychology in the Department of Leadership, Ethics and Law at the U.S. Naval Academy and former chair of APA's Ethics Committee.

"There's lots of evidence that human beings are generally not especially accurate when it comes to any assessment of a character trait or a skill," he says. "Sadly, the same applies to health-care professionals — we are not very good at accurately assessing our own level of competence."

Johnson and others urge psychologists to create "competency communities" through which they can engage in feedback from trusted friends and colleagues. Such a network was critical to Johnson, who turned to his clinical psychologist sister Shannon Johnson, PhD, as well as colleagues Jeffrey Barnett, PsyD, and Douglas Haldeman, PhD, when he was being treated for a brain tumor. "I really think that if I had been an isolated person in private practice at that point, this really would have been more problematic," says Johnson.

APA President Nadine Kaslow, PhD, of Emory University in Atlanta, says the friends and colleagues in her "competence constellation" have supported her through good times and bad. "I greatly value the strength of these bonds, the honesty in these relationships and the diversity of perspectives these colleagues offer," she says.

To spur a culture change away from independence and more toward mutual trust and compassionate feedback, these psychologists have recommended changes to the APA Ethics Code that obligates psychologists to look out for one another. "If we don't take adequate care of ourselves, eventually, our ability to care for others does deteriorate," Barnett says.

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• Divulge a secret. There are ways to make fast friends, too, psychologists say. Research by Stony Brook University professor Arthur Aron, PhD, showed that gradually increasing the depth of questions and answers between strangers can spawn friendships in just 45 minutes (*Personality and Social Psychology Bulletin*, 1997). Fehr and her team are building on this model by directing a couple of college buddies first to ask each other neutral questions, such as, "When did you last go to the zoo?" and slowly build up to more intimate questions such as, "If you knew someone close to you was going to die tomorrow, what would you tell them today — and why haven't you told them yet?"

So far, she's seeing men's friendships getting stronger. "When they do open up to each other, they feel closer to each other and they feel more satisfaction with the relationship," she says.

• Realize it's in your head. Loneliness is a subjective experience that can often be a self-fulfilling prophecy, says Cacioppo. "When people feel isolated, the brain goes into self-preservation mode," he says, meaning that they become preoccupied with their own — not others' — welfare. While the response is an innate one meant to protect us from threats, over time, it harms physical and mental health and well-being, and makes us more likely to see everything in a negative light. It can also make us seem cold, unfriendly and socially awkward. But recognizing what's in your head can help you get out of it, Cacioppo says.

In a review of interventions to reduce loneliness, he and colleagues found that those that encouraged participants to challenge their own negative thought processes — for example, by sharing a positive part of their day with someone else — were more effective than interventions seeking to improve social skills, enhance social support or increase opportunities for social contact. "It has a surprising effect," Cacioppo says. (*Personality and Social Psychology Review*, 2010).

• Log on, with caution. Liz Scherer, a copywriter in Silver Spring, Md., used social media to forge friendships when she moved from New York City to Annapolis, Md., about 10 years ago at age 42. Through Twitter, she connected online with others in her business and met many of them in person at social media conferences. "I've made some really good friends who I talk to … every single day," she says. "They're good social supports and business supports."

Research suggests Scherer's positive experience with social media is most common among people who are already well connected. A review of four studies by psychologist Kennon Sheldon, PhD, of the University of Missouri, and colleagues, for example, found that more time on Facebook was linked to both high and low levels of connectedness. Psychologists posit this may be the case because Facebook supports relationships among those who are already highly socially connected, but might make those who are isolated feel even more so (*Journal of Personality and Social Psychology*, 2011).

"If you rely on virtual relationships entirely, that's probably bad for you," Carstensen says. "But when you're using email and face time to supplement real relationships, that's a good thing."

• Don't force it. If the pressure to forge new relationships is more external than internal, put away the "friend wanted" ad and focus on what and who *does* make you happy, says Carstensen. "If people are not very socially active and they aren't necessarily interested in expanding their social networks, and they seem OK emotionally, then you shouldn't feel alarmed," she says.

After all, being highly connected has its downsides, too, says University of Sheffield psychologist Peter Totterdell, PhD, who studies social networks in organizations. He's found that people with large work-based networks tend to be more anxious than those with fewer connections. "Possibly what's going on there is that you get more possibilities, more resources, but at the same time you've got more responsibility as well," he says.

And trying to change who you are can backfire, since people's likelihood to forge connections seems to be relatively constant throughout life, Totterdell says. "People may have a natural inclination, and to try to change that [may] make them uncomfortable with the results," he says.

The bottom line? Whether you're content with two close friends or prefer to surround yourself with 20 loose acquaintances, what matters is that you feel a part of something greater than yourself, Carstensen says.

"We shouldn't judge people who say, 'I'm not a party goer, I don't want to make friends, I don't want to hang out in the bars or the clubs' — that's fine," she says. "There's a whole bunch of people who feel the same way." ■

Further reading

Social network changes and life events across the life span: A meta-analysis.

Wrzus, Cornelia; Hänel, Martha; Wagner, Jenny; Neyer, Franz J.

Psychological Bulletin, Vol. 139(1), Jan 2013, 53-80.

Social Relationships and Mortality Risk: A Meta-analytic Review. Holt-Lunstad, Julianne; Smith, Timothy B.; Layton, Bradley J. *PLoS Med* 7(7), July 27, 2010.

"Loneliness: Human Nature and the Need for Social Connection," by John T. Cacioppo and William Patrick. (W.W. Norton & Company, 2008).

"Friendfluence: The Surprising Ways Friends Make Us Who We Are," by Carlin Flora. (Doubleday, 2013).