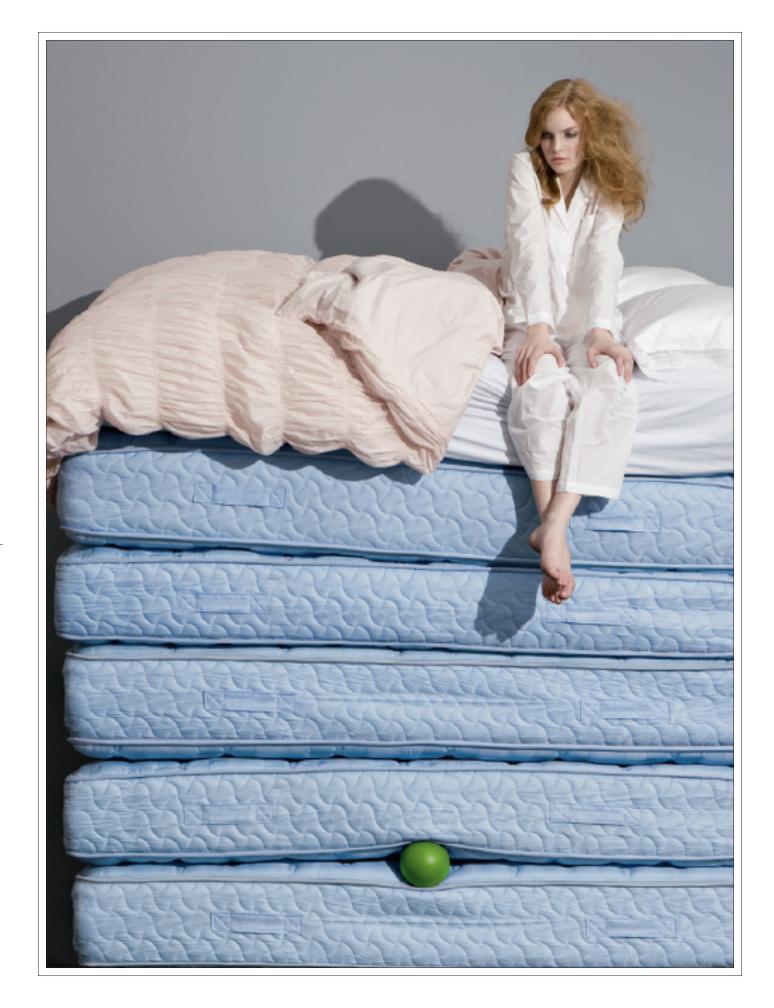
THEY TEAR UP AT PHONE COMMERCIALS.
THEY BROOD FOR DAYS OVER A GENTLE RIBBING.
THEY KNOW WHAT YOU'RE FEELING BEFORE YOU DO.

# 

THEIR NERVE CELLS ARE ACTUALLY HYPERREACTIVE. SAY HELLO TO THE HIGHLY SENSITIVE PERSON—YOU'VE PROBABLY ALREADY MADE HIM CRY

By Andrea Bartz • Photographs by Fredrik Broden



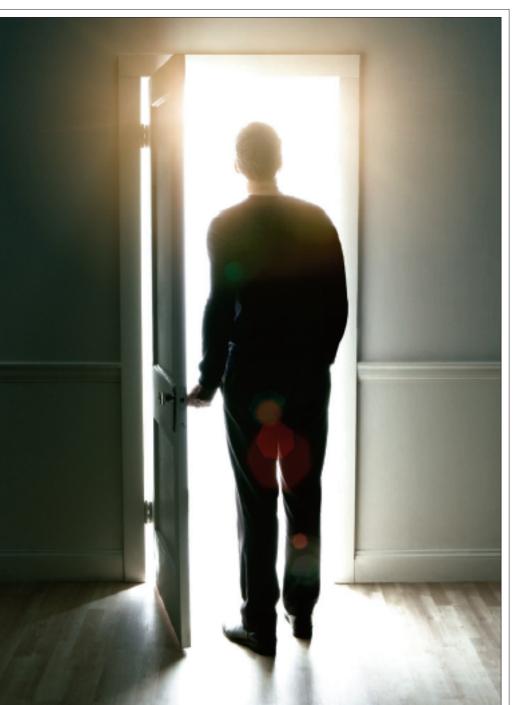


ETTLING INTO A CHAIR for coffee with a friend, Jodi Fedor feels her heart begin to pound. Tension creeps through her rib cage. Anger vibrates in her solar plexus. But she's not upset about anything. The person across from her is. Fedor soaks up others' moods like a sponge.

On a walk through her neighborhood in Ottawa, Canada, her attention zeroes in on the one budded leaf that hasn't unfurled; it brings a lump to her throat. The cawing of a far-off crow galvanizes her attention. An abandoned nest half-hidden amid the treetops fills her with awe.

Less lovely stimuli can have equally powerful effects. As a child, a casual school-yard taunt led to "sobbing and histrionics." Nowadays a small slight can ricochet through her entire body "like I'm actually wounded."

Fedor is sensitive—an adjective usually preceded by *too*. "I'm like an exposed nerve," she says. "At its worst, my sensitivity turns me into an emotional weather vane at the whim of my environment." But at its best, it's a gift, a fine-tuned finger on the pulse of every flutter of her surroundings.



The Highly Sensitive Person has always been part of the human landscape. There's evidence that many creative types are highly sensitive, perceiving cultural currents long before they are manifest to the mainstream, able to take in the richness of small things others often miss. Others may be especially sensitive to animals and how they are handled. They're also the ones whose feelings are so easily bruised that they're constantly being told to "toughen up."

Today, science is validating a group of people whose sensitivity surfaces in many domains of life. Attuned to subtleties of all kinds, they have a complex inner life and need time to process the constant flow of sensory data that is their inheritance. Some may be particularly prone to the handful of hard-to-pin-down disorders like chronic fatigue syndrome and fibromyalgia. Technology is now providing an especially revealing window into that which likely defines them all-a nervous system set to register stimuli at very low frequency and amplify them internally.

We all experience shades of sensitivity. Who isn't rocked by rejection and crushed by criticism? But for HSPs, emotional experience is at such a constant intensity that it shapes their personality and their lives—job performance, social life, intimate relationships—as much as gender and race do. Those who

learn to dial down the relentless swooping and cresting of emotions that is the almost invariable accompaniment to extreme sensitivity are able to transform raw perception into keen perceptiveness.

Dan Nainan, a full-time stand-up comic based in New York, gets tunnel vision after every show: "A thousand people stop by and say they enjoyed it, but one person says something negative and I take it so personally," he says. "It's led to some fights and has almost come to physical blows." He appreciates the irony in hating criticism yet voluntarily getting in front of a packed auditorium every night. "In a regular 9-to-5, no one's walking up to you and yelling, 'You're terrible!"

#### THE OUTSIDE, AMPLIFIED

HIGHLY SENSITIVE PEOPLE are all around us. They make up about 20 percent of the population, and likely include equal numbers of men and women. All the available evidence suggests they are born and not made.

You would likely spot them by their most visible feature, their overemotionality. Shari Lynn Rothstein-Kramer, who owns a marketing firm in Miami, Florida, cries almost daily. The sight of a beautiful outfit or exquisite handbag can choke her up. She recently found a note from a neighbor on her windshield that read, "Park in the middle of your space!!" and teared up on the spot. She had to persuade herself not to let it ruin her day.

The proverbial thin skin of HSPs covers a highly permeable nervous system. Gentle ribbing or an offhand jab can leave them brooding for days. But just as likely, an unexpected compliment or kind exchange can send their mood soaring, while the sight of a dad playing adoringly with his child can bring on tears fueled by a rush of warmth.

A news segment about a disturbing event—a death, a rape—can upset them deeply. Reading about a recent gang rape, New York actor and writer Jim Dailakis became "overwhelmingly emotional. I couldn't stop thinking about what that poor woman went through and how it affected her loved ones. I felt sadness mixed with unbelievable rage toward her attackers." Given their extreme ability to sense and internalize the moods of those

around them, the presence of an agitated person, even a stranger with whom they never interact, can make them uneasy.

HSPs often have a heightened sense of smell or touch and, say, zero tolerance for itchy fabrics or sudden sounds—reflecting their low threshold for sensory input. They complain about things no one else notices; a colleague's deodorant or a scented candle gives them headaches. And there's that damn light buzzing in the otherwise quiet office. An hour or two into a party or other sensory-rich event and they've withdrawn to a corner, a prelude to announcing they need to go home.

Above all, HSPs are defined by their internal experience. "It's like feeling something with 50 fingers as opposed to 10," explains Judith Orloff, a psychiatrist and author of *Emotional Freedom*. "You have more receptors to perceive things."

Highly sensitive people are often taken for introverts, and, as with introverts, social interaction depletes them. But

they take action. Any risks they face are carefully calculated.

#### **DELICATE SUBJECTS**

THE NOTION THAT there is a whole category of people whose nervous systems overreact to ordinary stimuli grew out of the personal experience of psychologist Elaine Aron. In 1991, she began seeing a psychotherapist for help coping with her intense response to a medical issue. On Aron's second visit, the therapist non-chalantly suggested that Aron's outsize reaction to a minor physical problem was "just because you're highly sensitive."

"I had noticed I was different," she says, "but I didn't have a way to conceptualize it. The term stuck with me, and I set out to see what we really mean by 'sensitivity." The short answer: nothing like the acute emotional responsiveness she had in mind. An in-depth search of the literature turned up only an occasional reference to chemical or medication sen-

# SOMETHING WITH 50 FINGERS AS OPPOSED TO 10.

in fact they react strongly to *everything* in their environment. As a result, they need and typically seek extra processing time to sort out their experience. About one in five HSPs are actually extraverts, social sensation seekers who derive pleasure from chatty interactions. But they, too, draw unusually heavily on cognitive horsepower to digest their experiences.

Rothstein-Kramer considers herself a highly sensitive extravert. "I'd even go with 'gregarious," she says, chuckling. "When people are positive, it inspires me to be more outgoing and energized." But negative interactions send her spiraling south: "People give me the highest highs and lowest lows."

In general, the heavy cognitive demands on all HSPs predispose them to a more reactive than boldly active stance in life. All that sensory input consumes psychic resources for thinking before sitivity and vague references to sensitivity as a key dimension of mothering.

Aron's search led her to the work of Ernest Hartmann, a psychiatrist at Tufts University best known for his dream research. Around the same time, he was solidifying the concept of boundaries as a dimension of personality and way of experiencing the world. Life, he observes, is made up of boundaries—between past and present, you and me, subject and object. And people differ in the way they embody and perceive boundaries.

In his schema, people with thin mental boundaries do not clearly separate the contents of consciousness, so that a fantasy life of daydreaming may bump right up against everyday reality. It's as if those with thin boundaries have porous shells that allow more of their environment to penetrate and "get" to them—and into their dreams. Hartmann's concept of the

# TIPS FOR THE TOUCHY

Highly sensitive? "You've probably gone through life assuming you're like the other 80 percent of people," Aron says. "The truth is, you need a whole different instruction manual." Here are a few adjustments you can make to sync your life with your mode of sensory processing.

#### • Designate downtime.

Your brain works overtime processing input and soaking up others' moods, so it needs a chance to recover. "Limit stimulation when you can," Aron suggests. "Turn the radio off when you're driving. Use a sleep mask and earplugs at night." Meditation is also a powerful way to tamp down stress hormones. Orloff prescribes quick, three-minute meditations during the day: Sit quietly, put your hand over your heart, deepen your breathing, and focus on something beautiful—a picture of your child.

#### • Talk yourself calm.

Sensitive people aren't doomed to spend life reeling from rejection. It's possible to rein in a response before it spirals down to depression. Fedor carries a checklist in her wallet and runs through it when she feels under attack: "Is this about me? What is the intent of the other person? Am I reacting because this brings out fear in me?" Similarly, Rothstein-Kramer asks herself, "How can I interpret this situation in a different way?" "Practice controlling your reactions," she says; "eventually a little dig won't throw you."

#### • Change your interactions.

Kindly but firmly cut off energy drains. Say your friend is midway through her umpteenth rant about her job. "You have to lovingly but matter-of-factly say, 'I see you're going through something; when you want to get into solutions, I'm here for you, but right now this is hard for me to listen to," Orloff explains. "Tone of voice is everything."

#### • Arm yourself.

Sometimes, you'll be forced into a situation that sucks you dry—a conference you must endure for work, a business lunch with an insufferable kvetch. Protect yourself: "Visualize a shield around your body, keeping negative input out," Orloff says.

#### • Rewrite history.

Think back to the decisions you've regretted and the things you dislike about yourself: "Very often, they have to do with sensitivity," Aron points out. The surprise party where you wound up crying in your room and the promotion you turned down because it involved too much pressure make much more sense through the lens of your sensitivity. Acknowledge this.

thin-boundaried seemed to suggest that there indeed exists a group of people who take in a whole lot more than others.

Too, Aron saw intimations of highly sensitive people in Jerome Kagan's now-classic research delineating infant temperament. A Harvard psychologist, Kagan had found that about 10 to 20 percent of infants begin life with a tightly tuned nervous system that makes them easily aroused, jumpy, and distressed in response to novel stimuli. Such highly reactive infants, as he termed them, run the risk of growing into "inhibited" children, who tend to withdraw from experience as a defense and are at high risk for anxiety.

Kagan says his "high reactives" have only one specific kind of sensitivity—"a sensitivity to events in the environment that imply a new challenge." And brain imaging studies show that their reactivity reflects a distinctive biological feature: a hyperresponsive amygdala, the brain center that assesses threats and governs

sitivity Aron had in mind might be linked to specific variations in gene expression in the nervous system, notably genes related to production of the neurotransmitters serotonin and dopamine.

One gene variation, the short-short allele of the serotonin transporter 5-HTT, has long been associated with a vulnerability to depression and anxiety. Recent data indicate that the very same gene variant brings an array of cognitive benefits—including better, and more profitable, decision-making in gambling situations. Aron suspects the allele may be present in HSPs and could account for their tendency to assess risks thoroughly.

"It's hard to imagine this trait enduring in the gene pool if it led only to negative emotions like depression," Aron says. "The problematic outcomes are just easier to observe than more positive interactions with the environment."

Brain imaging studies suggest real differences in the brains of HSPs versus

# IN PERSONALITY, HSPs MAY SEEM MOODY, DRAMATIC, TIMID, PERHAPS EVEN WIMPY.

the fear response. Unexpected events—from a blizzard to a pop quiz—set off the alarm system embedded in their naturally touchy amygdala, keeping them on the constant lookout for danger.

Relieved to find indications that there existed people governed by sensitivity, Aron was disappointed that the feature, however defined, was associated only with pathology. As a psychologist, she says, "I decided to start at the ground and see what people who identify with the word think of it." Thirty "grueling" three-hour interviews later, she was on her way to creating a 27-item questionnaire that is the benchmark for sensitivity. "I have a rich, complex inner life." Check. "I am made uncomfortable by loud noises." Check.

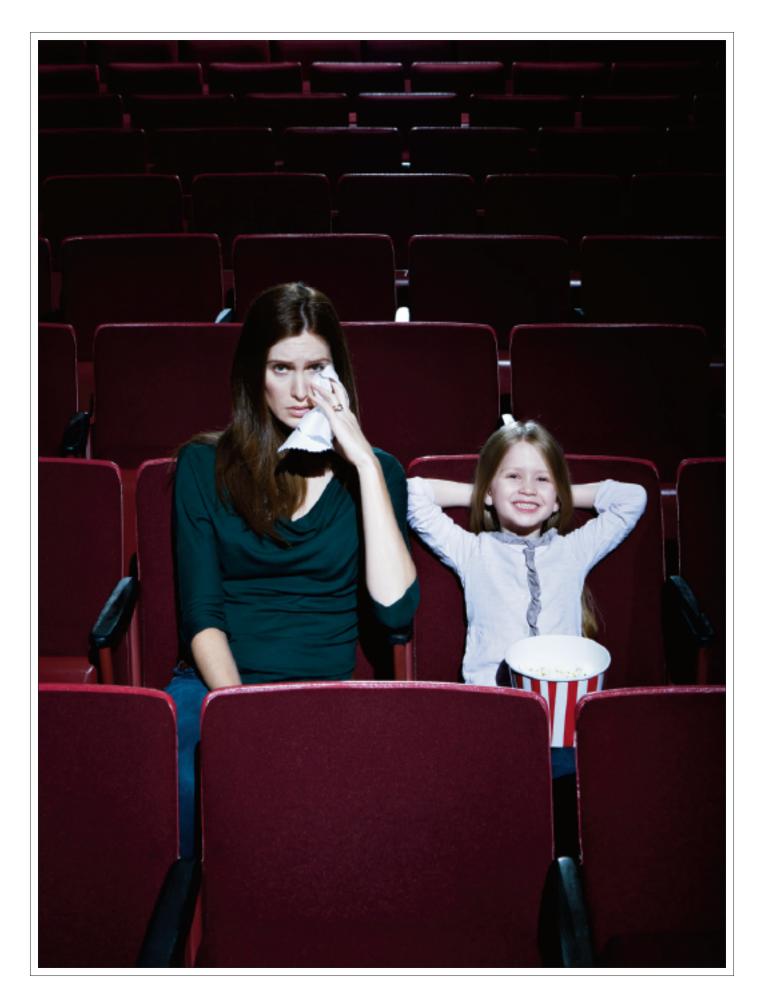
#### **BORN TO BE MILD**

ADVANCING NEUROSCIENCE research suggests that the kind of emotional sen-

everyone else. Cortical areas linked to attention and processing perceptual data show higher activation in response to all kinds of stimuli. Further, the possibility of reward sparks an outsize response in the reward circuit, and fear-related regions are particularly stirred by threats.

In his own research on thin-boundaried people, Tufts' Ernest Hartmann has found a strong link to creativity that Aron believes applies to HSPs as well. Of hundreds of student artists and musicians he has studied, nearly all test positive on his thin-boundaries questionnaire. Many fewer do among those who are able to make a profession of the arts—suggesting that it takes more than practice to make it to Carnegie Hall.

A 2003 study reported in the *Journal* of *Personality and Social Psychology* found that the brains of creative people appear to be far more open to incoming



stimuli than those of the noncreative. During a simple task, they experience little latent inhibition—they do not screen out irrelevant data from consciousness and more of their brains are highly activated from moment to moment.

Their extreme responsiveness to all situations, Aron believes, makes HSPs prone to anxiety and depression in the face of a distressing situation. But it also makes life richer; sights, sounds, flavors, images of beauty are more vivid. It's as if HSPs alone see the world in high-def.

#### A BASIS IN BIOLOGY

YET ANOTHER FACET of sensitivity is the focus of independent research by

Michael Jawer. A decade ago, Jawer was an investigator for the Environmental Protection Agency looking into reports of sick building syndrome and preparing air-quality guidance for building owners. Why, he wanted to know, did only a handful of people complain about indoor environmental conditions?

"Some said that in everyday life they've been disabled by exposure to colognes, paints, pesticides, trace elements in the air," he says. "And some went on to tell me they'd been emotionally sensitive for many years. Perhaps the same factors that were disposing certain people to complain about their environment suggested a broader aspect of sensitivity than just the emotional kind."

When he surveyed people Aron had identified as HSPs, he found unusual susceptibility to an array of conditions long thought to have a psychosomatic component. Much more than others in the population, they suffered from migraines, irritable bowel syndrome, chronic fatigue syndrome, allergies, and fibromyalgia. Jawer felt the findings point to wide-scale biological differences in HSPs.

"Take migraines," he says. "We know they're triggered by a number of things in the environment—sights, smells, even changes in the weather." Moods, too, can act as a catalyst: "Strong feelings, even ones people don't realize they have, can

> bring migraines on," says Jawer. He believes HSPs are unusually touchy to both emotional and tangible irritants-to mean-spirited comments as well as pollen or dander in the air.

> Behind it all, says Orloff, is likely a hair-trigger flight-or-fight response. A lower threshold of activation of stress hormones would leave the body flooded with cortisol and adrenaline. Chronically elevated stress hormones are linked with a host of health problems, from heart disease to decreased bone density to impaired memory.

> To Aron, the evidence adds up to a distinctive personality type. The HSP's touchy nervous system leads to a touchy temperament. Like the princess sensing the pea below her tower of mattresses, HSPs perceive the slightest sensory or emotional provocation, then respond with a flurry of brain activity that begets an outsize reaction rumination, tears, histrionics, on one hand, or unbridled enthusiasm on the other. Their personalities may run the gamut from moody to dramatic-all the product of their unique biology.

#### **MISSING MEN?**

IN CRAFTING HER questionnaire, Aron was determined to include only those questions men and women answered in equal proportions and calibrated it so that 20 percent of males and females

registered as highly sensitive. But once she started administering the test to the general population, far fewer than 20 percent of males came up HSP-positive. Where did the guys go—or were they never there to begin with?

Aron insists that males and females are born highly sensitive in equal numbers—but some men grow up actively hiding it. "They don't want to identify as sensitive."

Kagan's "reactives," too, were male and female in equal measure—at 4 months of age. But "the male peer group is very harsh with shy, timid boys," he explains, and by young adulthood, the highly reactive males were very difficult to pick out from the nonreactive population.

The neural basis of sensitivity appears no different in men and women. But the resulting behaviors—tearing up in joy, getting upset by a ribbing, feeling overwhelmed at a concert or sporting event may violate even contemporary Western

sion. Likewise, a "Nice job!" atop a book report might not seem like a gamechanger, but to a sensitive child a little encouragement can have outsize effects, motivating a child to reproduce that behavior—say, by studying well for the next test. School and parenting practices can dramatically shape the development of highly sensitive children, who can thrive spectacularly in a mildly encouraging classroom or struggle endlessly in a slightly discouraging one, while a nonsensitive child would wind up about the same regardless of slight variations in the environment.

The possibility of opposite outcomes—downward spiral or rocketing success—underscores the double-edged nature of sensitivity. Neither flaw nor gift, it is, rather, an amplifier of an environment's effects. Sensitive people who happened to have troubled childhoods may wind up with high rates of anxiety and depression, but HSPs who were loved negativity of others, they can flourish.

HSPs inhabit a teeming world of vibrant colors, sharp smells, striking sounds, and powerful tugs at their emotions. "I am, and I always will be, extremely aware of my environment and the people within it," Fedor says. As CEO of a successful beauty company, she surrounds herself with supportive people. "I tried toughening up, rooting myself in taxing situations," she says. "Then I realized I was spending my time coping instead of thriving. Now I know that I can choose to respond or to let something go." For her, it's a purer way of savoring this piquant world. PT

ANDREA BARTZ is the News Editor of Psychology Today.

# TT'SNEITHERA FLAWNOR AGIFTBUTRATHERANAMPLIFIER OF AND ENVIRONMENT'S EFFECTS.

standards of masculinity. HSP males may look effeminate to potential mates. (No, there's no evidence that HSP males are disproportionately homosexual.)

"In North America, in particular, we CRAZY, WILL YOU?" expect boys to be tough and to be risktakers," says Ted Zeff, a San Francisco psychologist whose in-depth interviews with more than 30 highly sensitive men in five countries resulted in a book, The Strong, Sensitive Boy. "Boys are told to hide all emotions other than anger. This is especially hard on sensitive boys, who have to repress their natural tendencies."

New York's Jim Dailakis admits "I definitely hide my sensitivity from certain people. Wearing your heart completely on your sleeve leaves you open to ridicule."

#### **DOUBLE-EDGED EFFECTS**

INTERNALIZED BY A highly sensitive child, ridicule can snowball into depresand encouraged as children can grow into well-adjusted adults.

# "YOU WON'T MAKE ME SOUND

FEDOR AND ROTHSTEIN-KRAMER both ask the same question, out of the blue, mid-interview. Connoisseurs of small slights, study partners who cannot focus with that stupid jackhammer roaring outside, HSPs are subject to a constant influx of criticism exhorting them to toughen up or to grow cojones. That message—that they're somehow unacceptable as they are—resonates with intensity.

Aron would like to see HSPs focus more on what they have to offer. They make compassionate friends who truly care about others; they channel beauty from the world into art and music; they notice things others miss. Ensconced in safe environments and steeled against the

# **DEALING** DELICATE **PEOPLE**

Since 20 percent of the population is highly sensitive, "you're probably working with or are even friends with one-you just didn't realize it," Aron says. Now that you know the hallmarks of this personality, adjust your behavior to make your interactions smoother.

#### • Skip the tips.

HSPs are mighty sick of hearing, "You really shouldn't let it get to you" from well-meaning friends. They experience it as a put-down, a suggestion that they've done something wrong. Say something more reassuring—such as, that whatever situation is causing them stress will improve shortly.

#### Modify your view.

In a close relationship, you may discover you've been making wrong assumptions about your partner. You may hear things like "I never liked going to those sporting events or concerts." Aron warns, Forgo the temptation to respond with grief or anger. Just accept it.

#### • Respect their space.

A common mistake HSPs' loved ones make: hovering. "They promise their partner an hour of recharge time," Orloff says, "and then they hang around waiting for you to come out." Better to tell them, "Fine, go replenish, I'll be out mowing the lawn"-and do it.

