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Bored?

Don't blame your job, the traffic or your mindless chores. Battling boredom, researchers say, means finding focus, living in the moment and having something to live for

Key Concepts: Dissecting Dullness

* Most people blame boredom on the circumstances, but psychologists say this emotion is highly subjective and rooted in aspects of consciousness—and that levels of boredom vary among people. Some individuals are less—and others considerably more—likely to be bored than others.
* Boredom is not a unified concept but may comprise several varieties, including the transient type that occurs while waiting in line and so-called existential boredom that accompanies a profound dissatisfaction with life.
* Boredom is linked to both emotional factors and personality traits. Problems with attention also play a role, and thus techniques that improve a person's ability to focus may diminish boredom.

By Anna Gosline

In a quiet, darkened lecture room, you begin a frustrating fight against fatigue. The overhead projector hums, and you cannot concentrate on the slides. You stop absorbing information and doodle mindlessly. The professor lost you eons ago. You are bored.

Virtually everyone gets bored once in a while. Most of us chalk it up to a dull environment. "The most common way to define boredom in Western culture is 'having nothing to do,' " says psychologist Stephen Vodanovich of the University of West Florida. And indeed, early research into the effects of boredom focused on people forced to perform monotonous tasks, such as working a factory assembly line.

But boredom is not merely an inherent property of the circumstances, researchers say. Rather this perception is subjective and rooted in aspects of consciousness. Levels of boredom vary among people: some individuals are far less prone to ennui than others—and some, such as extroverts, are more susceptible to this feeling.

Thus, a new generation of scientists is grappling with the psychological underpinnings of this most tedious of human emotions—and they have found that it is more complicated than is commonly known. Researchers say that boredom is not a unified concept but rather comes in several flavors. Level of attention, an aspect of conscious awareness, plays an important role in boredom, such that improving a person's ability to focus may therefore decrease ennui. Emotional factors can also contribute to boredom. People who are inept at understanding their feelings and those who become sucked in and distracted by their moods are more easily bored, for example.

Staving off tedium is no mundane matter. People who are predisposed to boredom are more likely to suffer from ills such as depression and drug addiction; they also tend to be socially awkward and poor performers at school or work. Getting at the origins of boredom may lead to ways to prevent and treat such pathologies and detrimental behaviors.

Monotony in the Mind

Researchers have tackled the topic of boredom for nearly a century. In the early days they deliberated on the effects of inherently tedious tasks, inspired by the hoards of bored and badly performing workers in factories. For instance, in a 1926 paper published in the British Medical Journal, psychologist A. Hudson Davies of the National Institute of Industrial Psychology in the U.K. reported that boredom is akin to mental fatigue and is caused by repetition and lack of interest in the minute and fragmented tasks of the production assembly line. Davies also noted individual differences in boredom susceptibility among factory workers: "There are still people who are not bored by work of this kind and people who, even on the most varied work, maintain a steadily depressed attitude to life and complain bitterly of monotony."

In the late 1930s psychologist Joseph Barmack of the

City College of New York was among the first to study boredom's basis in a laboratory setting. He proposed that boredom is a sleeplike feeling, and he found that stimulants—a trio of amphetamines, ephedrine and caffeine—reduced reports of fatigue, sleepiness, inattention and boredom during repetitive tasks, such as adding up a series of large numbers. Giving money to his student subjects also seemed to pique their interest, suggesting the tiresome feelings were a combination of low arousal and insufficient motivation.

More than a decade later, in a 1951 book entitled Organization and Pathology of Thought, Austrian-born psychoanalyst Otto Fenichel identified a type of boredom that results from the repression of a person's drives and desires and leads to apparent aimlessness. Fenichel contrasted such "pathological" boredom with normal boredom, which, he wrote, arises simply "when we must not do what we want to do, or must do what we do not want to do."

Research on boredom continued in a sparse and piecemeal fashion for the next 30 years. Then, in 1986, psychologist Norman D. Sundberg, now emeritus professor at the University of Oregon, and his then student Richard F. Farmer, now at the Oregon Research Institute, developed perhaps the most unifying piece of research on boredom, resulting in the 28-question Boredom Proneness Scale (BPS), the first full psychometric scale designed to measure boredom as a trait.

The BPS tests people for their propensity to be bored across different situations. That is, almost everyone experiences the transient type of world-weariness that arises from situations that are undeniably repetitious, monotonous or constraining—such as waiting in line. But some people experience boredom much more frequently. They might need more excitement from life, experience leisure-time boredom (arising from an inability to amuse themselves), or suffer from a kind of "existential" ennui that stems from an overarching lack of meaning or purpose in life.

People who are often bored are at greater risk of developing anxiety, depression, and drug or alcohol addiction; displaying anger, aggressive behavior and lack of interpersonal skills; and performing poorly at work and at school, among other problems, according to work that Vodanovich and his colleagues have conducted over the past two decades.

Need for Novelty

From one vantage point, boredom susceptibility boils down to two major factors, suggests a 2005 analysis of the BPS by Vodanovich and psychologists J. Craig Wallace of Oklahoma State University and West Florida's Steven Kass. The first is external stimulation, or the need for novelty, excitement and variety. Men, who are generally more bored than women, score higher here, according to Vodanovich. "Men are more likely to say, 'There is not enough stuff coming through the environment, and that's why I am bored,'" he explains.

This need for external stimulation may explain why extroverts tend to be particularly prone to boredom. Many early studies on the performance of monotonous tasks found that extroverts often falter and lose accuracy much earlier than their introverted counterparts. The reason, according to personality pioneer Hans Eysenck of the Institute of Psychiatry in London, is that extroverts require a constant and changing supply of stimulation to achieve their optimal arousal levels.

Consistent with this idea, extroverts tend to score higher on the classic sensation-seeking scale developed in the 1960s by University of Delaware psychologist Marvin Zuckerman. This scale, meant to measure an individual's hunger for stimuli, includes questions designed to rate boredom susceptibility.

Not all studies have found a connection between extroversion and boredom, however, and some extroverts might successfully avert boredom by finding ways to inject a little intrigue into otherwise dull tasks. In 1975 psychologist A. B. Hill of the University of Keele in England reported that among 32 college students who were asked to perform a mind-numbing task involving picking up and placing pushpins, the 16 extroverts showed much greater variation in the way they performed the task than did the 16 introverts—in effect, increasing their level of stimulation by changing the work in subtle but interesting ways.

In other words, although extroverts may generally seek out more external stimulation, they may vary in the ability to generate their own stimulation—the second major factor Vodanovich teased out of the BPS. Creative people with many hobbies and interests, those who have the ability to keep themselves occupied in all manner of circumstances, tend not to become bored easily. Says Sundberg: "I believe that one should be able to sit like a Buddhist monk in complete silence and yet not be bored—and to find within the inner mind, the life, the entertainment and the growth."

In the absence of these inner amusement skills, the external world will always fail to provide enough excitement and novelty. "The brain is always seeking stimulation and over time it takes more and more. It's a losing battle. You just cannot get enough," Vodanovich says.

A longing for thrills to drive away ennui may lead people to indulge in destructive, sensation-seeking activities, including smoking, vandalism, gambling and drugs. A 2005 study of 92 Scottish teenagers, for example, found that boredom was among the top reasons stated for taking drugs. "Drug use takes place during downtime when the person would have otherwise been entertaining [himself or herself]," says clinical psychologist McWelling Todman of the New School for Social Research, who studies boredom in psychiatric and drug-recovery communities.

Paying Attention

Boredom is also linked to problems with attention. After all, it is hard to be interested in something when you

cannot concentrate on it. Scientists have even demonstrated this by manipulating a test environment so that people have trouble engaging in certain tasks.

In one classic 1989 experiment, psychologists James Laird and Robin Damrad-Frye of Clark University discovered that very low level distraction such as a quiet television turned on in the next room led participants to describe a listening comprehension task as "boring." Unaware of what was distracting them, the subjects could find no other explanation for their inattention. But when the TV was blaring, the subjects instead commented that the sound made it impossible to focus. Without any distraction, some students actually said that what they had heard in the comprehension exercise was stimulating. The results thus support the authors' hypothesis that "the essential behavioral component of boredom is the struggle to maintain attention."

Boredom may also grow out of a pathological inability to focus. A 2003 study by Vodanovich, Wallace and Kass found that among 148 college students, scores on the BPS were correlated with measures for adult attention-deficit hyperactivity disorder (ADHD), hinting that a tendency to be bored may be the result of an attention deficit.

Cognitive neuroscientist Daniel Smilek of the University of Waterloo in Ontario, along with Waterloo psychologists Al Cheyne and Jonathan Carriere, has linked boredom proneness to everyday lapses in attention—the type that cause a person to, say, put the milk in the cupboard and the cereal in the fridge. In June 2007 the Waterloo team reported testing 304 college students for their tendency toward daily attention lapses and their awareness of feelings and surroundings. The students were also assessed for everyday forgetfulness, distractibility and clinical depression.

The researchers found that the students who were prone to memory lapses and attention failures scored relatively high on the BPS. What is more, statistical models suggested that attention failures underlay the elevated scores for boredom proneness as well as for depression—an illness that shares documented similarities with boredom, including a negative mood and loss of meaning in life, Cheyne says. A chronic inability to focus on activities may render them effectively meaningless, the researchers surmise. "Attention is the common link between lack of meaning, depression and boredom," Cheyne says.

Others, meanwhile, have characterized boredom as the antithesis of something called flow, a state characterized by effortless attention, focus and absorption in a task, akin to being "in the zone" [see "Why It's So Hard to Be Happy-," by Michael Wiederman; Scientific American Mind, February/March 2007]. Flow, says the theory's developer, psychologist Mihaly Csikszentmihalyi of Claremont Graduate University, occurs when a person's skills match the level of challenge presented by the environment and when a task includes clear goals and immediate feedback. Tasks that are too easy, he says, are boring. In contrast, tasks that people perceive to be too difficult lead to anxiety. For example, in a study published in 2003 Csikszentmihalyi and his colleagues found that flow most often occurred among 526 high school students when challenges were high but balanced with students' perceived skills.

Not in the Mood

Emotional factors can also have an impact on attentiveness, flow and thus boredom. Work by educational psychologist Mary B. Harris, now an emeritus professor at the University of New Mexico, links boredom with mood monitoring, a tendency to scrutinize and focus on your moods. In 2000 Harris asked 170 college students to fill out the BPS, along with a questionnaire that determined how often they experienced flow and whether they were mood monitors or mood labelers, people with the ability to identify and categorize their moods.

Harris found that mood monitors scored higher on the BPS and were less likely to experience flow. She concludes that a close watch on your own emotions provides "less opportunity for intense concentration on the situation and for a flow experience to occur. For a high mood monitor, engaging in an activity will require an effortful maintenance of attention, resulting in more frequent feelings of boredom." On the other hand, boredom is less of a problem for mood labelers. By accurately assessing their emotions, these individuals can effectively forget about them and focus on the tasks at hand.

The results mirrored those from a 1998 study of 308 college students by Vodanovich and West Florida's Hope M. Seib, in which individuals high in positive self-awareness—awareness of their own internal states—reported lower overall boredom. In contrast, those who showed a lot of negative self-awareness—characterized by judgmental ruminations—had elevated scores on the BPS.

Understanding your own internal states may be an important factor in boredom irrespective of its influence on attention. Fenichel's 1951 psychoanalytical explanation for boredom posited that repression of wants and desires leads to an aimless, meaningless state of being because the sufferer does not know what he or she wants to do.

Experimental evidence partially supports the notion that boredom can arise from an inability to identify the activities that will lead to happiness and fulfillment. In 2007 clinical psychologist John D. Eastwood of York University in Toronto and his colleagues reported that students who scored high on scales of alexithymia—a deficiency in understanding and describing your own feelings, accompanied by an inhibited emotional and fantasy life—also scored higher on the BPS.

Evidence that such a cause for boredom exists independently of attention problems comes from unpublished work by Eastwood's group in which the researchers analyzed scores from 206 students on the BPS, a diagnostic for adult ADHD, and a scale of emotional awareness. They

found that both higher levels of inattention and reduced emotional awareness explain a significant, but separate, amount of the variation in students' proneness to boredom.

At its extreme, an inability to know what will make you happy can lead to a more profound existential boredom arising from a pervasive sense of meaninglessness. Existential boredom might also occur when a person abandons important life goals and dreams because of practical concerns or other pressures. In 2000 clinical psychologist Richard Bargdill, now at Saint Francis University, described six cases of what he calls "life boredom," in which the neglect of life goals leads to a state of emotional ambivalence and pervasive boredom. For example, one woman who had surrendered her dream of becoming a biologist now found herself in an empty nest with a husband she loathed; another man had abandoned his wish to become an astronomer to pursue religion as his occupation. "To be bored is to be disengaged from the world," Eastwood concludes.

Combating Boredom

Treatments for boredom, like the feeling itself, come in many varieties. If boredom stems from understimulating work, a solution might be to change jobs or to enrich the working environment with new levels of complexity and challenge, Csikszentmihalyi suggests. For example, a supermarket clerk might improve service by taking the time to strike up a genuine conversation with customers. A 1970 study of long-distance truck drivers by psychologist William McBain of San Jose State College found that drivers who played mental games, such as counting passing objects, reported little boredom. They were also safer drivers.

If boredom envelops leisure time, an individual might try to develop new interests, skills or hobbies, says Vodanovich, who has struggled with his own boredom. For his part, he makes an effort to spice up everyday routines, by varying his driving route to the office and even the way he looks at the world around him. "You can train yourself to see the richness of the environment," he says. "If you can find a way to perceptually recognize the beauty of the world—the different colors of the leaves rather than just green, the different shapes—you are probably less likely to be bored overall."

This heightened appreciation of self and immediate surroundings also lies at the heart of mindfulness, "the state of being attentive to and aware of what is taking place in the present," wrote psychologists Kirk Warren Brown of Virginia Commonwealth University and Richard M. Ryan of the University of Rochester in a 2003 paper. Mindfulness training—a practice growing in popularity in educational, medical and office settings—is rooted in Eastern philosophies of meditation. Subjects are taught to slow down, focus on their breathing and bodily feelings, and let thoughts pass freely without judgment.

Such practices may decrease boredom by making people both more attentive and less likely to obsess over their own moods. In February 2007 psychologists at the University of Melbourne reported that a 10-day mindfulness course improved the performance of novice meditators on tasks of sustained attention and working memory—and also diminished rumination and symptoms of depression—as compared with the novices who did not receive mindfulness training.

Encouraging children to entertain themselves in mentally active and imaginative ways and to avoid passive, quick-fix entertainment could also reduce boredom. "We provide children lots of entertainment in the form of television and iPods to prevent them from developing their inner skills to contend with boredom," Sundberg says. Engaging in active entertainment, such as playing sports or games, is also much more likely to produce flow, Csikszentmihalyi says.

Developing ways to cope with boredom may even help cure other ills. For example, some research hints that if former drug addicts learn to deal effectively with boredom, they are less likely to relapse. In an ongoing study of 156 addicts at a methadone clinic at Beth Israel Medical Center in New York City, Todman found that the addicts' reported level of boredom was the only reliable indicator of whether they would stay clean.

Of course, boredom also has its benefits. It can provide an opportunity for thought and reflection, many study participants observe. It can also be a sign that a task is a waste of time—and thus not worth continuing. "Rather than fighting boredom, we would do well to pause and learn from the experience," Eastwood says.

Indeed, many scholars have considered boredom a catalyst for action. In his 1995 essay "In Praise of Boredom," Nobel Prize–winning poet Joseph Brodsky wrote: "When hit by boredom, go for it. Let yourself be crushed by it; submerge, hit bottom. In general, with things unpleasant, the rule is, the sooner you hit bottom, the faster you surface." Adds Vodanovich: "If you don't succumb to its negative effects, boredom is a great motivational force."