

## 5:1 What Is Mental Health?

Mentally healthy persons like themselves and relate well with others.

The National Association for Mental Health defines mental health as (1) being comfortable with yourself, (2) feeling good about your relationships with others, and (3) being able to meet the demands of life. This definition might also include being able to express emotions in healthful ways and being able to cope successfully with circumstances in your daily life.

The association also has a list of 27 characteristics that describe a person who has positive mental health (Table 5-1).

Table 5-1 Characteristics of Positive Mental Health

1. I feel comfortable with myself.
2. I am not overwhelmed by my emotions—fear, anger, love, jealousy, guilt, or worry.
3. I can take life's disappointments.
4. I have a tolerant, easygoing attitude toward myself and others; I can laugh at myself.
5. I neither underestimate nor overestimate my abilities.
6. I can accept my shortcomings.
7. I have self-respect.
8. I feel able to deal with most situations that come my way.
9. I get satisfaction from simple, everyday pleasures.
10. I feel good about my relationships with other people.
11. I am able to give love and to consider the interests of others.
12. I have personal relationships that are satisfying and lasting.
13. I like and trust others and expect that others will like and trust me.
14. I respect differences I find in people.
15. I do not push people around, or allow myself to be pushed around.
16. I feel that I am part of a group.
17. I feel a sense of responsibility to my neighbors and other persons with whom I come in contact.
18. I am able to meet the demands of my life.
19. I do something about my problems as they arise.
20. I accept my responsibilities.
21. I shape my environment whenever possible; I adjust to it whenever necessary.
22. I plan ahead but do not fear the future.
23. I welcome new experiences and new ideas.
24. I make use of my natural capacities.
25. I set realistic goals for myself.
26. I am able to think for myself and make my own decisions.
27. I put my best effort into what I do and get satisfaction out of doing it.

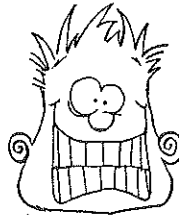
# How Are You Feeling Today?



EXHAUSTED



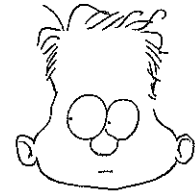
CONFUSED



ECSTATIC



GUILTY



SUSPICIOUS



ANGRY



HYSTERICAL



FRUSTRATED



SAD



CONFIDENT



EMBARRASSED



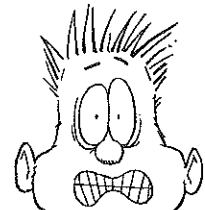
HAPPY



MISCHIEVOUS



DISGUSTED



FRIGHTENED



ENRAGED



ASHAMED



CAUTIOUS



SMUG



DEPRESSED



OVERWHELMED



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LONELY



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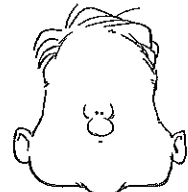
SURPRISED



ANXIOUS

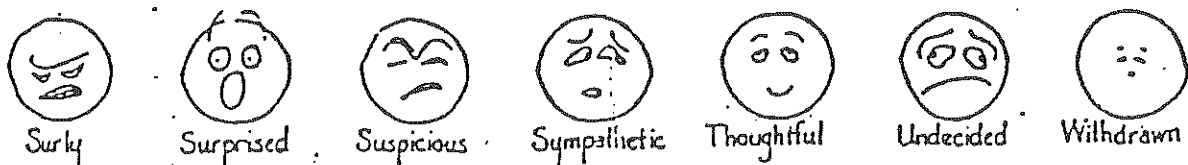
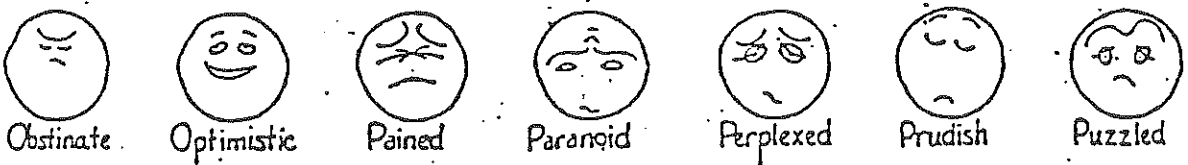
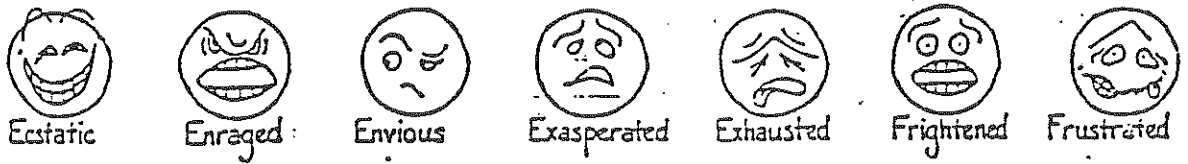
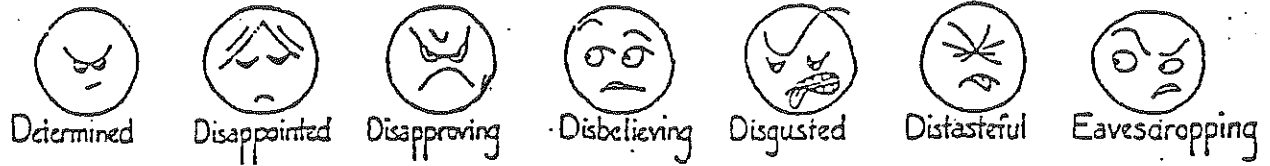


SHOCKED



SHY

# How do you feel today?



# Finding roads to happiness

## Positive thinking plays a big role, experts agree

By **MALCOLM RITTER**  
THE ASSOCIATED PRESS

**NEW YORK** — As a motivational speaker and executive coach, Caroline Adams Miller knows a few things about using mental exercises to achieve goals. But last year, one exercise she was asked to try took her by surprise.

Every night, she was to think of three good things that happened that day and analyze why they occurred. That was supposed to increase her overall happiness.

"I thought it was too simple to be effective," said Miller, 44, of Bethesda, Md. "I went to Harvard. I'm used to things being complicated."

Can money buy happiness? Researchers have an answer. **A-10**

Miller was assigned the task as homework in a master's degree program. But as a chronic worrier, she knew she could use the kind of boost the exercise was supposed to deliver.

She got it.

"The quality of my dreams has changed; I never have trouble falling asleep and I do feel happier," she said.

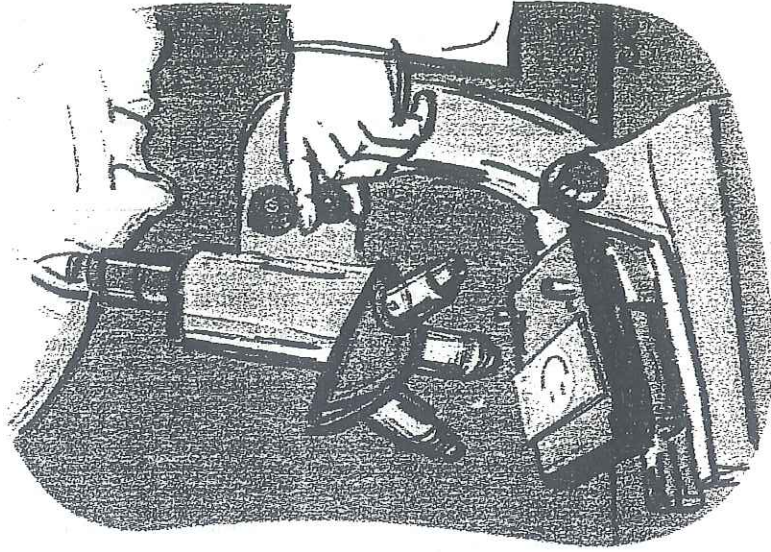
Results may vary, as they say in the weight-loss ads. But that exercise is one of several that have shown preliminary promise in recent research into how people can make themselves happier — not just

for a day or two, but long-term. It's part of a larger body of work that challenges a long-standing skepticism about whether that's even possible.

There's no shortage of advice in how to become a happier person, as a visit to any bookstore will demonstrate. In fact, Martin Seligman of the University of Pennsylvania and colleagues have collected more than 100 specific recommendations, ranging from those of Buddha through the self-improvement industry of the 1990s.

The problem is, most of the books on store shelves aren't backed up by rigorous research, says Sonja Lyubomirsky, a psy-

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**INSIDE**

THE RECORD

11/21/2006

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# Happy: Exercises

From Page A-1

chologist at the University of California at Riverside who's conducting such studies now. (She's also writing her own book.)

In fact, she says, there has been very little research in how people become happier.

Why? The big reason, she said, is that many researchers have considered that quest to be futile.

For decades, a widely accepted view has been that people are stuck with a basic setting on their happiness thermostat. It says the effects of good or bad life events such as marriage, a raise, divorce or disability will simply fade with time.

We adapt to them just like we stop noticing a bad odor from behind the living-room couch after a while, this theory says. So this adaptation would seem to doom any deliberate attempt to raise a person's basic happiness setting.

As two researchers put it in 1996, "It may be that trying to be happier is as futile as trying to be taller."

But recent long-term studies have revealed that the happiness thermostat is more malleable than the popular theory maintained, at least in its extreme form. "Setpoint is not destiny," says psychologist Ed Diener of the University of Illinois.

One new study showing change in happiness levels followed thousands of Germans for 17 years. It found that about a quarter changed significantly over that time in their basic level of satisfaction with life. (That's a popular happiness measure; some studies sample how one feels through the day instead.) Nearly a tenth of the German participants changed by three points or more on a 10-point scale.

## Life-changing events

Other studies show an effect of specific life events, though of course the results are averages and can't predict what will happen to particular individuals. Results show long-lasting shadows associated with events such as serious disability, divorce, widowhood and getting laid off.

The boost from getting married, on the other hand, seems to dissipate after about two years, says psychologist Richard E. Lucas of Michigan State University.

What about the joys of having children? Parents recall those years with fondness, but studies show child-rearing takes a toll on marital satisfaction, Harvard psychologist Daniel Gilbert notes in his recent book "Stumbling on Happiness." Parents gain in satisfaction as their kids leave home, he said.

"Despite what we read in the popular press," he writes, "the only known symptom of 'empty-nest syndrome' is increased smiling."

Gilbert says people are awful at predicting what will make them happy. Yet, Lucas says, "most people are happy most of the time." That is, in a group of people who have reasonably good health and income, most will probably rate a 7.5 or so on a happiness scale of zero to 10, he says.

Still, many people want to be happier. What can they do? That's where research by Lyubomirsky, Seligman and others comes in.

The think-of-three-good-things exercise that Miller, the motivational speaker, found so simplistic at first is among those being tested by Seligman's group at the University of Pennsylvania.

People keep doing it on their own because it's immediately rewarding, said Seligman colleague Acacia Parks. It makes people focus more on good things that happen, which might otherwise be forgotten because of daily disappointments, she said.

Miller said the exercise made her notice more good things in her day, and that now she routinely lists 10 or 20 of them, rather than just three.

## Personal strengths

A second approach that has shown promise in Seligman's group has people discover their personal strengths through a specialized questionnaire and choose the five most prominent ones. Then, every day for a week, they are to apply one or more of their strengths in a new way.

Strengths include such things as the ability to find humor or summon enthusiasm, appreciation of beauty, curiosity and love of learning. The idea of the exercise is that using one's major "signature" strengths may be a good way to get engaged in satisfying activities.

These two exercises were among five tested on more than 500 people who'd visited a Web site called "Authentic Happiness." Seligman and colleagues reported last year that the two exercises increased happiness and reduced depressive symptoms for the six months that researchers tracked the participants. The effect was greater for people who kept doing the exercises frequently. A follow-up study recently began.

Another approach under study now is having people work on savoring the pleasing things in their lives, such as a warm shower or a good breakfast, Parks said. Yet another promising approach is having people write down what they want to be remembered for, to help them bring their daily activities in line with what's really important to them, she said.

Lyubomirsky, meanwhile, is testing some other simple strategies. "This is not rocket science," she said.

For example, in one experiment, participants were asked to

regularly practice random acts of kindness, things such as holding a door open for a stranger or doing a roommate's dishes, for 10 weeks. The idea was to improve a person's self-image and promote good interactions with other people.

Participants who performed a variety of acts, rather than repeating the same ones, showed an increase in happiness even a month after the experiment was concluded.

Those who kept on doing the acts on their own did better than those who didn't.

Other approaches for which Lyubomirsky has found some preliminary promise include thinking about the happiest day in your life over and over again, without analyzing it, and writing about how you'll be 10 years from now, assuming everything goes just right.

Some strategies appear to work better for some people than others, so it's important to get the right fit, she said.

But it'll take more work to see just how long the happiness boost from all these interventions actually lasts, with studies tracking people for many months or years, Lyubomirsky said.

Any long-term effect probably will depend on people continuing to work at it, just as folks who move to Southern California can lose their appreciation of the ocean and weather unless they pursue activities that highlight those natural benefits, she said.

In fact, Diener says, happiness probably is really about work and striving.

"Happiness is the process, not the place," he said via e-mail. "So many of us think that when we get everything just right, and obtain certain goals and circumstances, everything will be in place and we will be happy. ... But once we get everything in place, we still need new goals and activities. The princess could not just stop when she got the prince."

11-28-2006



# TEN KEYS TO HAPPINESS

by  
**Deepak Chopra, M.D.**

1) Listen to your body's wisdom, which expresses itself through the signals of comfort and discomfort. When choosing a certain behavior, ask your body, "How do you feel about this?" If the body sends a signal of physical or emotional distress watch out! If the body responds with joy and comfort—go for it!

2) Live in the moment. The present is the only moment you have. Have your attention on what IS and see its fullness in every moment. Have psychological acceptance totally and completely that this present moment is as it should be. How could it be otherwise? This moment is as is because the universe is as is. Don't struggle against the universe.

3) Take time to be silent, to quieten the internal dialogue, to be guided by your intuition, rather than externally imposed interpretations of what is or is not good.

4) Relinquish your need for approval. There is great freedom in that choice.

5) When you find yourself reacting with anger or violence to any person, situation, or circumstance—recognize that you struggle only against yourself. Don't be so hard on yourself.

6) Know that those you react to strongly, whether you love them or hate them, are reflections of yourself. Use the mirror of relationship to guide your own spiritual evolution.

7) Shed the burden of judgement—you will feel much lighter.

8) Don't contaminate your body with toxins—either through food, drink, or toxic emotions.

9) Replace fear-motivated behavior by love-motivated behavior.

10) Understand that the physical world mirrors the process in our own consciousness. Cleaning up the environment and getting rid of the toxic wastes and dumps that contaminate our earth, its rivers, and oceans is worthwhile, but even more important is the flushing out of toxic ideas that contaminate the human mind.



# Seeing Pessimism's Place in a Smiley-Faced World

By ERICA GOODE

Dr. Barbara Held has had just about enough of accentuating the positive and eliminating the negative.

She does not want to cheer up, look on the bright side or let a smile be her umbrella. And she is not planning to put a smiley face sticker on her car bumper any time soon.

In fact, Dr. Held views such activities as rather worrisome. She is one of a small band of psychologists who believe their profession — and indeed America as a whole — has succumbed to an ethos of unrelenting positivity. This “tyranny of the positive attitude,” as Dr. Held sees it, prescribes cheerfulness and optimism as a formula for success, resilience and good health, and equates negativity with failure, vulnerability and general unhealthiness.

Positive thinking is a staple of self-help books, popular music and Sunday sermons. And in recent years, it has also found a home in the positive psychology movement, which was founded to correct what its leaders, including Dr. Martin Seligman, a professor of psychology at the University of Pennsylvania and a former president of the American Psychological Association, saw as the field's overly narrow focus on mental illness and human failing.

But Dr. Held and like-minded colleagues, who gathered last week at the psychological association's annual meetings in Washington for a symposium titled “The (Overlooked) Virtues of Negativity,” feel that bliss can be taken too far.

While positive thinking has its advantages, they argue, a little whining now and then is not such a bad thing. Pessimism, in some circumstances, may have its place. And the unrelieved pressure to be upbeat, they assert, may gloss over individual needs and differences, and may make some people feel worse instead of better.

“I'm worried that we're not making space for people to feel bad,” said Dr. Held, a clinical psychologist at Bowdoin College in Brunswick, Me., and the author of “Stop Smiling Start Kvetching.”

“Life is very hard,” Dr. Held said. “If you're having a hard time with something, it can make it harder to cope if you feel pressure to act O.K. when you're not.”

A large body of experimental work has elaborated on the pluses of optimism and positive thinking, which appear to have beneficial effects on performance, social adjustment and some aspects of health. But at least some research supports the notion that in some cases, it may be more useful to see the glass as half empty.

Dr. Julie Norem, a social psychologist at Wellesley College, for example, has studied “defensive pessimism,” a coping strategy that involves setting unrealistically low expectations, then mentally playing out all the possible outcomes of a given situation.

For instance, Dr. Norem explained, a defensive pessimist is likely to approach a coming public speaking engagement with mounting anxiety. But rather than giving herself a pep talk or using positive imagery to calm herself down, the defensive pessimist will picture herself tripping over the microphone cord, dropping her notes and dissolving into a fit of coughing.

Yet this anxious reverie will also include plans for avoiding such humiliation, like wearing low heeled shoes or having a glass of water on the lectern. “This mental rehearsal tends to make defensive pessimists feel less anxious, and so they actually perform better,” Dr. Norem said.

In laboratory experiments, the psychologist and her colleagues have found, defensive pessimists indeed perform as well on tasks as “strategic optimists,” who are less anxious, tend to set high expectations for their own performance and avoid thinking about all the things that could go wrong.

But the performance of each group suffers when it is impeded from engaging in its preferred strategies.

In one study, for example, defensive pessimists and strategic optimists participated in a dart throwing exercise. The subjects were randomly assigned to prepare for the task in one of three ways. In one, they engaged in “coping imagery,” imagining something going wrong and taking steps to fix it, a strategy close to the natural approach of defensive pessimists. In the second, the subjects practiced “mastery,” imagining a flawless performance. In the third, the participants engaged in a relaxation exercise, distracting themselves from the pending dart-throwing by imagining a peaceful scene, perhaps a beach.

Defensive pessimists, the researchers found, did well in the game when they prepared using imagery that mimicked their preferred coping style. But their performance declined when they imagined performing perfectly and they did even worse when asked to act like optimists, distracting themselves with relaxing images. Strategic optimists, in contrast, performed best after the relaxation exercise and worst when they imagined things going wrong.

Other researchers have investigated the benefits of griping (high for those who do it infrequently, lower for frequent complainers) and extent of pessimism in different cultures. (Asian-Americans, one study found, are more pessimistic than Caucasian-Americans, and are more likely to use pessimism as a way of coping.)

Work by Dr. James Pennebaker, a professor of psychology at the University of Texas at Austin, also underlines the positive role of

what some might call “constructive negativity.”

Obsessively ruminating about how miserable life is, studies show, can have a harmful effect on health. But in a series of studies, Dr. Pennebaker and his colleagues asked subjects to focus on stressful or disturbing life events in a structured way, writing essays about the most traumatic experience of their lives, for example. The subjects' health improved on a variety of measures, and this improvement persisted for up to four months after the studies were over.

Dr. Pennebaker said he was happy to be considered part of the positive psychology movement but that “a lot depends on what we mean by positive psychology.”

“There's some reasonably compelling evidence to suggest that when people are falsely peppy and upbeat and chipper, it's

A little whining now and then never hurt anyone, and it may, in fact, help.

not very healthy,” he said.

And, he added, little data supports the idea that a positive attitude enhances health — something he pointed out repeatedly several years ago when his wife developed breast cancer, and people kept telling her, “You just need to be positive all the time.”

In fact, Dr. Pennebaker added, a 1989 study he published with Dr. David Watson, now at the University of Iowa, indicates that even nervous, unhappy people, prone to chronic complaining, appear to be no more unhealthy than their buoyant peers. Subjects in the study who scored high on measures of nervousness, apprehension, irritability and oversensitivity were more likely to complain about physical symptoms. But they were no more likely to visit the doctor, develop high blood pressure or die.

“It's not bad to be nervous and it's not bad to be angry,” Dr. Watson said in an interview. “We have these emotions because they serve useful functions for us.”

The participants in last week's symposium emphasized that they hoped to temper, not to disparage the field's interest in positive things. “I'm not saying it's good to let people wallow in the negative,” said Dr. Arthur Beauhart, a humanistic psychologist at California State University at Dominguez Hills. “I see this as a healthy corrective, or an expanding of the positive psychology movement.” But psychologists identified with that movement say that positive psychology already makes clear that at times optimism is neither appropriate nor beneficial.

Dr. Seligman, a founder of positive psychology, expressed amusement that a positive focus could stir controversy. “I'm all for negative psychology,” he said. “I spent 35 years of my life doing it. It just seems to me that there's no danger that people are going to be working exclusively on the positive. I think most of psychology has been about going from minus 8 to minus 5.”

NYT - 8/15/2000

MIND | Benedict Carey

# Why the Imp in Your Brain Gets Out

The visions seem to swirl up from the brain's sewage system at the worst possible times — during a job interview, a meeting with the boss, an apprehensive first date, an important dinner party. What if I started a food fight with these hors d'oeuvres? Mocked the host's stammer? Cut loose with a racial slur?

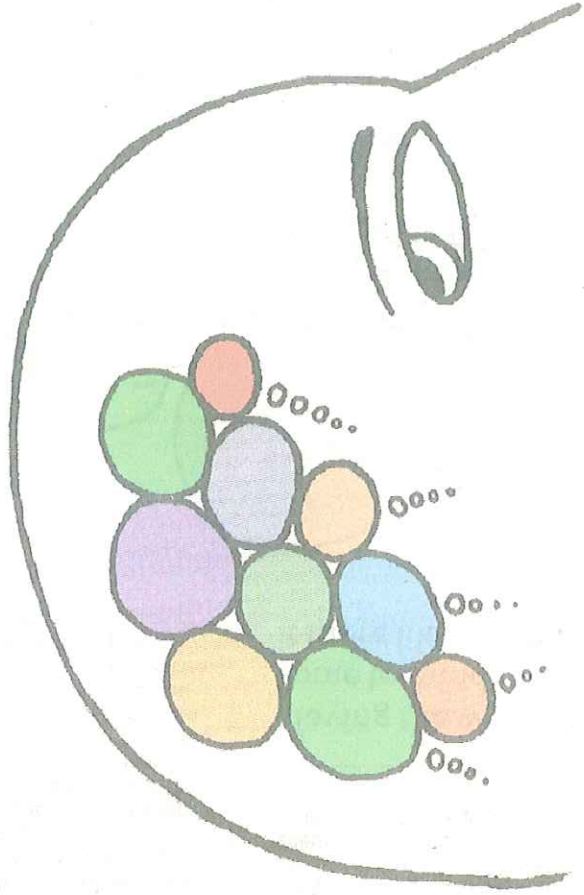
"That single thought is enough," wrote Edgar Allan Poe in "The Imp of the Perverse," an essay on unwanted impulses. "The impulse increases to a wish, the wish to a desire, the desire to an uncontrollable longing."

He added, "There is no passion in nature so demoniacally impatient, as that of him who, shuddering upon the edge of a precipice, thus meditates a plunge."

Or meditates on the question: Am I sick?

In a few cases, the answer may be yes. But a vast majority of people rarely, if ever, act on such urges, and their susceptibility to rude fantasies in fact reflects the workings of a normally sensitive, social brain, argues a paper published last week in the *Journal of Neuroscience*.

"There are all kinds of pitfalls in social life, everywhere we look; not just errors but worst possible errors come to mind, and they come to mind easily," said the paper's author, Daniel M. Wegner, a psychologist at Harvard. "And having the worst thing come to mind, in some circumstances, might increase the likelihood that it will happen."



SCOTT MENCHIN

trary urges are — and when they are most likely to alter people's behavior.

At a fundamental level, functioning socially means mastering one's impulses. The adult brain expends at least as much energy on inhibition as on action, some studies suggest, and mental health relies on abiding strategies to ignore or suppress deeply disturbing thoughts — of one's own inevitable death, for example. These strategies are general, subconscious or semiconscious psychological programs that usually run on automatic pilot.

Perverse impulses seem to arise

*Continued on Page 6*

## Perverse impulses arise when you focus on avoiding taboos.

The exploration of perverse urges has a rich history (how could it not?), running through the stories of Poe and the Marquis de Sade to Freud's repressed desires and Darwin's observation that many actions are performed "in direct opposition to our conscious will." In the past decade, social psychologists have documented how common such con-



# Why the Imp in Your Brain Gets Out

From *First Science Page*

when people focus intensely on avoiding specific errors or taboos. The theory is straightforward: to avoid blurting out that a colleague is a raging hypocrite, the brain must first imagine just that; the very presence of that catastrophic insult, in turn, increases the odds that the brain will spit it out.

"We know that what's accessible in our minds can exert an influence on judgment and behavior simply because it's there, it's floating on the surface of consciousness," said Jamie Arndt, a psychologist at the University of Missouri.

The empirical evidence of this influence has been piling up in recent years, as Dr. Wegner documents in the new paper. In the lab, psychologists have people try to banish a thought from their minds — of a white bear, for example — and find that the thought keeps returning, about once a minute. Likewise, people trying not to think of a specific word continually blurt it

out during rapid-fire word-association tests.

The same "ironic errors," as Dr. Wegner calls them, are just easy to evoke in the real world. Golfers instructed to avoid a specific mistake, like overshooting, do it more often when under pressure, studies find. Soccer players told to shoot a penalty kick anywhere but at a certain spot of the net, like the lower right corner, look at that spot more often than any other.

Efforts to be politically correct can be particularly treacherous. In one study, researchers at Northwestern and Lehigh Universities had 73 students read a vignette about a fictional peer, Donald, a black male. The students saw a picture of

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Having the worst thing  
come to mind might make  
it more likely to happen.

him and read a narrative about his visit to a mall with a friend.

In the crowded parking lot, Donald would not park in a handicap space, even though he was driving his grandmother's car, which had a pass, but he did butt in front of another driver to snag a nonhandicap space. He snubbed a person collecting money for a heart fund, while his friend contributed some change. And so on. The story purposely portrayed the protagonist in an ambiguous way.

The researchers had about half the students try to suppress bad stereotypes of black males as they read and, later, judged Donald's character on measures like honesty, hostility and laziness. These students rated Donald as significantly more hostile — but also more honest — than did students who were not trying to suppress stereotypes.

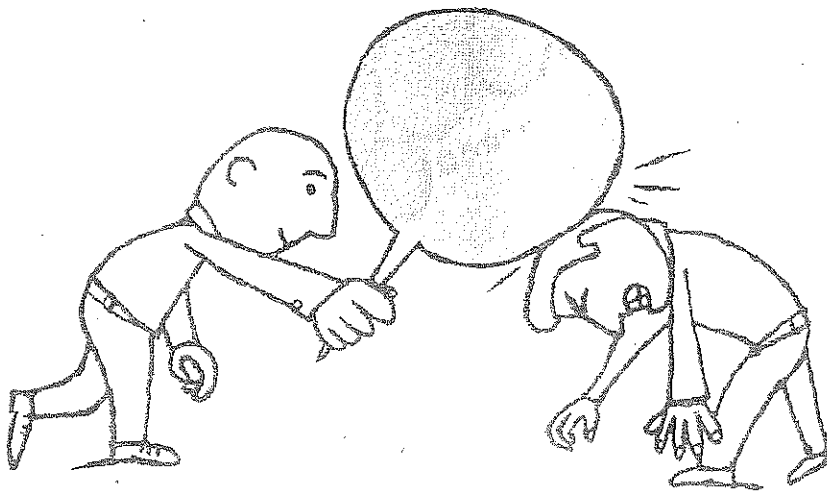
In short, the attempt to banish biased thoughts worked, to some extent. But the study also provided "a strong demonstration that stereotype suppression leads stereotypes to become hyperaccessible," the authors concluded.

Smokers, heavy drinkers and other habitual substance users know this confusion too well: the effort to squelch a longing for a smoke or a drink can bring to mind all the reasons to break the habit; at the same time, the desire seemingly gets stronger.

The risk that people will slip or "lose it" depends in part on the level of stress they are undergoing, Dr. Wegner argues. Concentrating intensely on not staring at a prominent mole on a new acquaintance's face, while also texting and trying to follow a conversation, heightens the risk of saying: "We went to the mole — I mean, mall. Mall!"

"A certain relief can come from just getting it over with, having that worst thing happen, so you don't have to worry about monitoring in anymore," Dr. Wegner said.

All of which might be hard to explain, of course, if you've just mooned the dinner party.



SCOTT MENCHIN

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FINDINGS | John Tierney

# The Advantages of Closing a Few Doors

The next time you're juggling options — which friend to see, which house to buy, which career to pursue — try asking yourself this question: What would Xiang Yu do?

Xiang Yu was a Chinese general in the third century B.C. who took his troops across the Yangtze River into enemy territory and performed an experiment in decision making. He crushed his troops' cooking pots and burned their ships.

He explained this was to focus them on moving forward — a motivational speech that was not appreciated by many of the soldiers watching their retreat option go up in flames. But General Xiang Yu would be vindicated, both on the battlefield and in the annals of social science research.

He is one of the role models in Dan Ariely's new book, "Predictably Ir-



VIKTOR KOEN

rational," an entertaining look at human foibles like the penchant for keeping too many options open. General Xiang Yu was a rare exception to the norm, a warrior who conquered by being unpredictably rational.

Most people can't make such a painful choice, not even the students at a bastion of rationality like the Massachusetts Institute of Technology, where Dr. Ariely is a professor of behavioral economics. In a series of experiments, hundreds of students could not bear to let their options vanish, even though it was obviously a dumb strategy (and they weren't even asked to burn anything).

The experiments involved a game that eliminated the excuses we usually have for refusing to let go. In the real world, we can always tell ourselves that

*Continued on Page 6*

# The Advantages of Closing a Few Doors

From *First Science Page*

it's good to keep options open.

You don't even know how a camera's burst-mode flash works, but you persuade yourself to pay for the extra feature just in case. You no longer have anything in common with someone who keeps calling you, but you hate to just zap the relationship.

Your child is exhausted from after-school soccer, ballet and Chinese lessons, but you won't let her drop the piano lessons. They could come in handy! And who knows? Maybe they will.

In the M.I.T. experiments, the students should have known better. They played a computer

duced. If they stayed out of any room, its door would start shrinking and eventually disappear.

They should have ignored those disappearing doors, but the students couldn't. They wasted so many clicks rushing back to reopen doors that their earnings dropped 15 percent. Even when the penalties for switching grew stiffer — besides losing a click, the players had to pay a cash fee — the students kept losing money by frantically keeping all their doors open.

Why were they so attached to those doors? The players, like the parents of that overscheduled piano student, would probably say they were just trying to keep fu-

“Closing a door on an option is experienced as a loss, and people are willing to pay a price to avoid the emotion of loss,” Dr. Ariely says. In the experiment, the price was easy to measure in lost cash. In life, the costs are less obvious — wasted time, missed opportunities. If you are afraid to drop any project at the office, you pay for it at home.

“We may work more hours at our jobs,” Dr. Ariely writes in his book, “without realizing that the childhood of our sons and daughters is slipping away. Sometimes these doors close too slowly for us to see them vanishing.”

Dr. Ariely, one of the most prolific authors in his field, does not

he says. “I have way too many projects, and it would probably be better for me and the academic community if I focused my efforts. But every time I have an idea or someone offers me a chance to collaborate, I hate to give it up.”

So what can be done? One answer, Dr. Ariely said, is to develop more social checks on overbooking. He points to marriage as an example: “In marriage, we create a situation where we promise ourselves not to keep options open. We close doors and announce to others we've closed doors.”

Or we can just try to do it on our own. Since conducting the



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game that paid real cash to look for money behind three doors on the screen. (You can play it yourself, without pay, at [tierneylab.blogs.nytimes.com](http://tierneylab.blogs.nytimes.com).) After they opened a door by clicking on it, each subsequent click earned a little money, with the sum varying each time.

As each player went through the 100 allotted clicks, he could switch rooms to search for higher payoffs, but each switch used up a click to open the new door. The best strategy was to quickly check out the three rooms and settle in the one with the highest rewards.

Even after students got the hang of the game by practicing it, they were flummoxed when a new visual feature was intro-

duced. But that's not the real reason, according to Dr. Ariely and his collaborator in the experiments, Jiwoong Shin, an economist who is now at Yale.

They plumbed the players' motivations by introducing yet another twist. This time, even if a door vanished from the screen, players could make it reappear whenever they wanted. But even when they knew it would not cost anything to make the door reappear, they still kept frantically trying to prevent doors from vanishing.

Apparently they did not care so much about maintaining flexibility in the future. What really motivated them was the desire to avoid the immediate pain of watching a door close.

## It may be unwise to try to keep every option open.

pretend that he is above this problem himself. When he was trying to decide between job offers from M.I.T. and Stanford, he recalls, within a week or two it was clear that he and his family would be more or less equally happy in either place. But he dragged out the process for months because he became so obsessed with weighing the options.

“I'm just as workaholic and prone to errors as anyone else,”

door experiments, Dr. Ariely says, he has made a conscious effort to cancel projects and give away his ideas to colleagues. He urges the rest of us to resign from committees, prune holiday card lists, rethink hobbies and remember the lessons of door closers like Xiang Yu.

If the general's tactics seem too crude, Dr. Ariely recommends another role model, Rhett Butler, for his supreme moment of unpredictable rationality at the end of his marriage. Scarlett, like the rest of us, can't bear the pain of giving up an option, but Rhett recognizes the marriage's futility and closes the door with astonishing elan. Frankly, he doesn't give a damn.

# Freud's Personality Factors

Sigmund Freud described several components which have been very influential in understanding personality.

## Three levels of awareness

Freud identified three different parts of the mind, based on our level of awareness.

### Conscious mind

The conscious mind is where we are paying attention at the moment. It includes only our current thinking processes and objects of attention, and hence constitutes a very large part of our current awareness.

### Preconscious mind

The preconscious includes those things of which we are aware, but where we are not paying attention. We can choose to pay attention to these and deliberately bring them into the conscious mind.

We can control our awareness to a certain extent, from focusing in very closely on one conscious act to a wider awareness that seeks to expand consciousness to include as much of preconscious information as possible.

### Subconscious mind

At the subconscious level, the process and content are out of direct reach of the conscious mind. The subconscious thus thinks and acts independently.

One of Freud's key findings was that much behavior is driven directly from the subconscious mind. This has the alarming consequence that we are largely unable to control our behavior, and in particular that which we would sometimes prefer to avoid.

More recent research has shown that the subconscious mind is probably even more in charge of our actions than even Freud had realized.

## Three components of personality

Freud described the human personality as being:

"...basically a battlefield. He is a dark-cellar in which a well-bred spinster lady (the superego) and a sex-crazed monkey (the id) are forever engaged in mortal combat, the struggle being refereed by a rather nervous bank clerk (the ego)."

Thus an individual's feelings, thoughts, and behaviors are the result of the interaction of the id, the superego, and the ego. This creates conflict, which creates anxiety, which leads to **Defense Mechanisms**.

### Id

The Id contains our primitive drives and operates largely according to the *pleasure principle*, whereby its two main goals are the seeking of pleasure and the avoidance of pain.

It has no real perception of reality and seeks to satisfy its needs through what Freud called the *primary processes* that dominate the existence of infants, including hunger and self-protection.

The energy for the Id's actions come from *libido*, which is the energy storehouse.

The id has 2 major instincts:

- *Eros*: the life instinct that motivates people to focus on pleasure-seeking tendencies (e.g., sexual urges).
- *Thanatos*: the death instinct that motivates people to use aggressive urges to destroy.

## Ego

Unlike the Id, the Ego is aware of reality and hence operates via the *reality principle*, whereby it recognizes what is real and understands that behaviors have consequences. This includes the effects of social rules that are necessary in order to live and socialize with other people. It uses *secondary processes* (perception, recognition, judgment and memory) that are developed during childhood.

The dilemma of the Ego is that it has to somehow balance the demands of the Id and Super ego with the constraints of reality.

The Ego controls higher mental processes such as reasoning and problem-solving, which it uses to solve the Id-Super ego dilemma, creatively finding ways to safely satisfy the Id's basic urges within the constraints of the Super ego.

## Super ego

The Super ego contains our values and social morals, which often come from the rules of right and wrong that we learned in childhood from our parents (this is Freud, remember) and are contained in the *conscience*.

The Super ego has a model of an *ego ideal* and which it uses as a prototype against which to compare the ego (and towards which it encourages the ego to move).

The Super ego is a counterbalance to the Id, and seeks to inhibit the Id's pleasure-seeking demands, particularly those for sex and aggression.

## Energy and Cathexis

Freud viewed the forces on us as a form of energy, with energy from the senses being converted into psychic energy in the personality through a *topographic model* that takes sensed energy, filters it through various associative metaphors, then passes it through the unconscious and preconscious before it finally reaches the conscious mind.

## Object-cathexis

This is the investment of energy in the image of an object, or the expenditure of energy in discharge action upon such an object. It occurs in the Id.

## Ego-cathexis

This is the investment of energy in mental representations of reality through associations and metaphors, which is needed for the Ego's secondary processes. It occurs in the Ego.

## Anti-cathexis

This is energy used to block object-cathexes of the Id. Repression occurs in the battle between cathexis and anti-cathexis. It occurs in the Ego and Super Ego.

## So what?

Although later theories have improved understanding, Freud's ideas still provide a useful model for the more complex actions that are really going on.

To persuade, you can appeal either to the basic urges of the Id or the higher morals of the Super ego. Then encourage the Ego to make the 'right choice'.

B. F. Skinner's entire system is based on **operant conditioning**. The organism is in the process of "operating" on the environment, which in ordinary terms means it is bouncing around its world, doing what it does. During this "operating," the organism encounters a special kind of stimulus, called a **reinforcing stimulus**, or simply a reinforcer. This special stimulus has the effect of increasing the operant -- that is, the behavior occurring just before the reinforcer. This is operant conditioning: "the behavior is followed by a consequence, and the nature of the consequence modifies the organism's tendency to repeat the behavior in the future."

Imagine a rat in a cage. This is a special cage (called, in fact, a "Skinner box") that has a bar or pedal on one wall that, when pressed, causes a little mechanism to release a food pellet into the cage. The rat is bouncing around the cage, doing whatever it is rats do, when he accidentally presses the bar and -- hey, presto! -- a food pellet falls into the cage! The operant is the behavior just prior to the reinforcer, which is the food pellet, of course. In no time at all, the rat is furiously peddling away at the bar, hoarding his pile of pellets in the corner of the cage.

*A behavior followed by a reinforcing stimulus results in an increased probability of that behavior occurring in the future.*

What if you don't give the rat any more pellets? Apparently, he's no fool, and after a few futile attempts, he stops his bar-pressing behavior. This is called **extinction** of the operant behavior.

*A behavior no longer followed by the reinforcing stimulus results in a decreased probability of that behavior occurring in the future.*

Now, if you were to turn the pellet machine back on, so that pressing the bar again provides the rat with pellets, the behavior of bar-pushing will "pop" right back into existence, much more quickly than it took for the rat to learn the behavior the first time. This is because the return of the reinforcer takes place in the context of a reinforcement history that goes all the way back to the very first time the rat was reinforced for pushing on the bar!

### Schedules of reinforcement

Skinner likes to tell about how he "accidentally -- i.e. operantly -- came across his various discoveries. For example, he talks about running low on food pellets in the middle of a study. Now, these were the days before "Purina rat chow" and the like, so Skinner had to make his own rat pellets, a slow and tedious task. So he decided to reduce the number of reinforcements he gave his rats for whatever behavior he was trying to condition, and lo and behold, the rats kept up their operant behaviors, and at a stable rate, no less. This is how Skinner discovered **schedules of reinforcement!**

**Continuous reinforcement** is the original scenario: Every time that the rat does the behavior (such as pedal-pushing), he gets a rat goodie.

The **fixed ratio schedule** was the first one Skinner discovered: If the rat presses the pedal three times, say, he gets a goodie. Or five times. Or twenty times. Or "x" times. There is a fixed ratio between behaviors and reinforcers: 3 to 1, 5 to 1, 20 to 1, etc. This is a little like "piece rate" in the clothing manufacturing industry: You get paid so much for so many shirts.

The **fixed interval schedule** uses a timing device of some sort. If the rat presses the bar at least once during a particular stretch of time (say 20 seconds), then he gets a goodie. If he fails to do so, he doesn't get a goodie. But even if he hits that bar a hundred times during that 20 seconds, he still only gets one goodie! One strange thing that happens is that the rats tend to "pace" themselves: They slow down the rate of their behavior right after the reinforcer, and speed up when the time for it gets close.

Skinner also looked at **variable schedules**. Variable ratio means you change the "x" each time -- first it takes 3 presses to get a goodie, then 10, then 1, then 7 and so on. Variable interval means you keep changing the time period -- first 20 seconds, then 5, then 35, then 10 and so on.

In both cases, it keeps the rats on their rat toes. With the variable interval schedule, they no longer "pace" themselves, because they can no longer establish a "rhythm" between behavior and reward. Most importantly, these schedules are very resistant to extinction. It makes sense, if you think about it. If you haven't gotten a reinforcer for a while, well, it could just be that you are at a particularly "bad" ratio or interval! Just one more bar press, maybe this'll be the one!

This, according to Skinner, is the mechanism of gambling. You may not win very often, but you never know whether and when you'll win again. It could be the very next time, and if you don't roll them dice, or play that hand, or bet on that number this once, you'll miss on the score of the century!

### Shaping

A question Skinner had to deal with was how we get to more complex sorts of behaviors. He responded with the idea of **shaping**, or "the method of successive approximations." Basically, it involves first reinforcing a behavior only vaguely similar to the one desired. Once that is established, you look out for variations that come a little closer to what you want, and so on, until you have the animal performing a behavior that would never show up in ordinary life. Skinner and his students have been quite successful in teaching simple animals to do some quite extraordinary things. My favorite is teaching pigeons to bowl!

I used shaping on one of my daughters once. She was about three or four years old, and was afraid to go down a particular slide. So I picked her up, put her at the end of the slide, asked if she was okay and if she could jump down. She did, of course, and I showered her with praise. I then picked her up and put her a foot or so up the slide, asked her if she was okay, and asked her to slide down and jump off. So far so good. I repeated this again and again, each time moving her a little up the slide, and backing off if she got nervous. Eventually, I could put her at the top of the slide and she could slide all the way down and jump off. Unfortunately, she still couldn't climb up the ladder, so I was a very busy father for a while.

This is the same method that is used in the therapy called **systematic desensitization**, invented by another behaviorist named **Joseph Wolpe**. A person with a phobia -- say of spiders -- would be asked to come up with ten scenarios involving spiders and panic of one degree or another. The first scenario would be a very mild one -- say seeing a small spider at a great distance outdoors. The second would be a little more scary, and so on, until the tenth scenario would involve something totally terrifying -- say a tarantula climbing on your face while you're driving your car at a hundred miles an hour! The therapist will then teach you how to relax your muscles -- which is incompatible with anxiety. After you practice that for a few days, you come back and you and the therapist go through your scenarios, one step at a time, making sure you stay relaxed, backing off if necessary, until you can finally imagine the tarantula while remaining perfectly tension-free.

This is a technique quite near and dear to me because I did in fact have a spider phobia, and did in fact get rid of it with systematic desensitization. It worked so well that, after one session (beyond the original scenario-writing and muscle-training session) I could go out and pick up a daddy-long-legs. Cool.

Beyond these fairly simple examples, shaping also accounts for the most complex of behaviors. You don't, for example, become a brain surgeon by stumbling into an operating theater, cutting open someone's head, successfully removing a tumor, and being rewarded with prestige and a hefty paycheck, along the lines of the rat in the Skinner box. Instead, you are gently shaped by your environment to enjoy certain things, do well in school, take a certain bio class, see a doctor movie perhaps, have a good hospital visit, enter med school, be encouraged to drift towards brain surgery as a speciality, and so on. This could be something your parents were carefully doing to you, as if you were a rat in a cage. But much more likely, this is something that was more or less unintentional.

### **Aversive stimuli**

**An aversive stimulus** is the opposite of a reinforcing stimulus, something we might find unpleasant or painful.

*A behavior followed by an aversive stimulus results in a decreased probability of the behavior occurring in the future.*

This both defines an aversive stimulus and describes the form of conditioning known as **punishment**. If you shock a rat for doing x, it'll do a lot less of x. If you spank Johnny for throwing his toys he will throw his toys less and less (maybe).

On the other hand, if you remove an already active aversive stimulus after a rat or Johnny performs a certain behavior, you are doing **negative reinforcement**. If you turn off the electricity when the rat stands on his hind legs, he'll do a lot more standing. If you stop your perpetually nagging when I finally take out the garbage, I'll be more likely to take out the garbage (perhaps). You could say it "feels so good" when the aversive stimulus stops, that this serves as a reinforcer!

*Behavior followed by the removal of an aversive stimulus results in an increased probability of that behavior occurring in the future.*

Notice how difficult it can be to distinguish some forms of negative reinforcement from positive reinforcement: If I starve you, is the food I give you when you do what I want a positive -- i.e. a reinforcer? Or is it the removal of a negative -- i.e. the aversive stimulus of hunger?

Skinner (contrary to some stereotypes that have arisen about behaviorists) doesn't "approve" of the use of aversive stimuli -- not because of ethics, but because they don't work well! Notice that I said earlier that Johnny will maybe stop throwing his toys, and that I perhaps will take out the garbage? That's because whatever was reinforcing the bad behaviors hasn't been removed, as it would've been in the case of extinction. This hidden reinforcer has just been "covered up" with a conflicting aversive stimulus. So, sure, sometimes the child (or me) will behave -- but it still feels good to throw those toys. All Johnny needs to do is wait till you're out of the room, or find a way to blame it on his brother, or in some way escape the consequences, and he's back to his old ways. In fact, because Johnny now only gets to enjoy his reinforcer occasionally, he's gone into a variable schedule of reinforcement, and he'll be even more resistant to extinction than ever!

### **Behavior modification**

**Behavior modification** -- often referred to as **b-mod** -- is the therapy technique based on Skinner's work. It is very straight-forward: Extinguish an undesirable behavior (by removing the reinforcer) and replace it with a desirable behavior by reinforcement. It has been used on all sorts of psychological problems -- addictions, neuroses, shyness, autism, even schizophrenia -- and works particularly well with children. There are examples of back-ward psychotics who haven't communicated with others for years who have been conditioned to behave themselves in fairly normal ways, such as eating with a knife and fork, taking care of their own hygiene needs, dressing themselves, and so on.


There is an offshoot of b-mod called the **token economy**. This is used primarily in institutions such as psychiatric hospitals, juvenile halls, and prisons. Certain rules are made explicit in the institution, and behaving yourself appropriately is rewarded with tokens -- poker chips, tickets, funny money, recorded notes, etc. Certain poor behavior is also often followed by a withdrawal of these tokens. The tokens can be traded in for desirable things such as candy, cigarettes, games, movies, time out of the institution, and so on. This has been found to be very effective in maintaining order in these often difficult institutions.

There is a drawback to token economy: When an "inmate" of one of these institutions leaves, they return to an environment that reinforces the kinds of behaviors that got them into the institution in the first place. The psychotic's family may be thoroughly dysfunctional. The juvenile offender may go right back to "the hood." No one is giving them tokens for eating politely. The only reinforcements may be attention for "acting out," or some gang glory for robbing a Seven-Eleven. In other words, the environment doesn't travel well!

SKINNER

## MASLOW'S HIERARCHY OF NEEDS

from Psychology - The Search for Understanding  
by Janet A. Simons, Donald B. Irwin and Beverly A. Drinnien  
West Publishing Company, New York, 1987



[Abraham Maslow](#) developed a theory of personality that has influenced a number of different fields, including education. This wide influence is due in part to the high level of practicality of Maslow's theory. This theory accurately describes many realities of personal experiences. Many people find they can understand what Maslow says. They can recognize some features of their experience or behavior which is true and identifiable but which they have never put into words.

Maslow is a humanistic psychologist. Humanists do not believe that human beings are pushed and pulled by mechanical forces, either of stimuli and reinforcements (behaviorism) or of unconscious instinctual impulses (psychoanalysis). Humanists focus upon potentials. They believe that humans strive for an upper level of capabilities. Humans seek the frontiers of creativity, the highest reaches of consciousness and wisdom. This has been labeled "fully functioning person", "healthy personality", or as Maslow calls this level, "self-actualizing person."

Maslow has set up a **hierarchical theory of needs**. All of his basic needs are instinctoid, equivalent of instincts in animals. Humans start with a very weak disposition that is then fashioned fully as the person grows. If the environment is right, people will grow straight and beautiful, actualizing the potentials they have inherited. If the environment is not "right" (and mostly it is not) they will not grow tall and straight and beautiful.

Maslow has set up a hierarchy of five levels of basic needs. Beyond these needs, higher levels of needs exist. These include needs for understanding, esthetic appreciation and purely spiritual needs. In the levels of the five basic needs, the person does not feel the second need until the demands of the first have been satisfied, nor the third until the second has been satisfied, and so on. Maslow's basic needs are as follows:

### **Physiological Needs**

These are biological needs. They consist of needs for oxygen, food, water, and a relatively constant body temperature. They are the strongest needs because if a person were deprived of all needs, the physiological ones would come first in the person's search for satisfaction.

### **Safety Needs**

When all physiological needs are satisfied and are no longer controlling thoughts and behaviors, the needs for security can become active. Adults have little awareness of their security needs except in times of emergency or periods of disorganization in the social structure (such as widespread rioting). Children often display the signs of insecurity and the need to be safe.

### **Needs of Love, Affection and Belongingness**

When the needs for safety and for physiological well-being are satisfied, the next class of needs for love, affection and belongingness can emerge. Maslow states that people seek to overcome feelings of loneliness and alienation. This involves both giving and receiving love, affection and the sense of belonging.

### **Needs for Esteem**

When the first three classes of needs are satisfied, the needs for esteem can become dominant. These involve needs for both self-esteem and for the esteem a person gets from others. Humans have a need for a stable, firmly based, high level of self-respect, and respect from others. When these needs are satisfied, the person feels self-confident and valuable as a person in the world. When these needs are frustrated, the person feels inferior, weak, helpless and worthless.

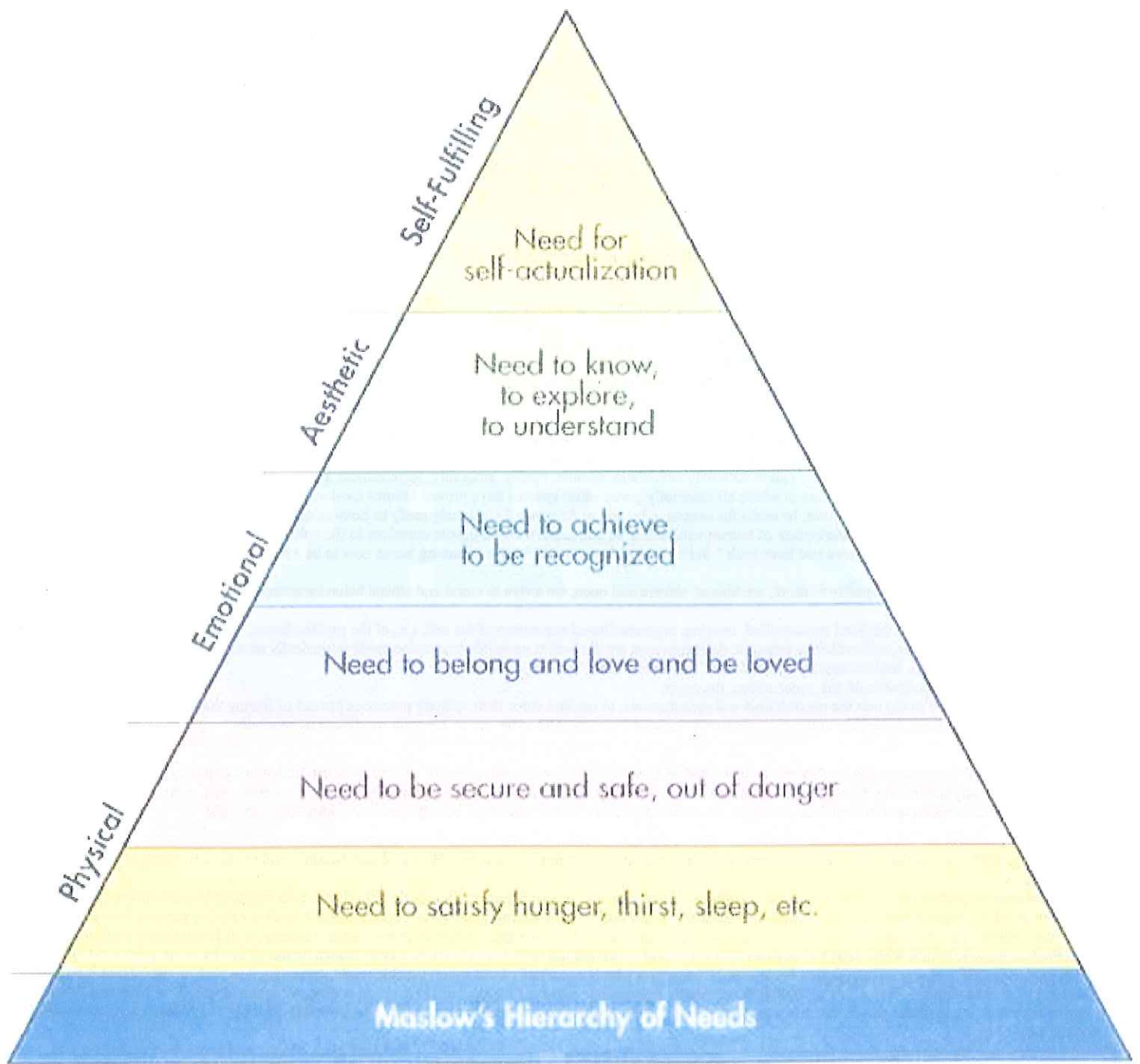


### Needs for Self-Actualization

When all of the foregoing needs are satisfied, then and only then are the needs for self-actualization activated. Maslow describes self-actualization as a person's need to be and do that which the person was "born to do." "A musician must make music, an artist must paint, and a poet must write." These needs make themselves felt in signs of restlessness. The person feels on edge, tense, lacking something, in short, restless. If a person is hungry, unsafe, not loved or accepted, or lacking self-esteem, it is very easy to know what the person is restless about. It is not always clear what a person wants when there is a need for self-actualization.

The hierarchic theory is often represented as a pyramid, with the larger, lower levels representing the lower needs, and the upper point representing the need for self-actualization. Maslow believes that the only reason that people would not move well in direction of self-actualization is because of hindrances placed in their way by society. He states that education is one of these hindrances. He recommends ways education can switch from its usual person-stunting tactics to person-growing approaches. Maslow states that educators should respond to the potential an individual has for growing into a self-actualizing person of his/her own kind. Ten points that educators should address are listed:

1. We should teach people to be *authentic*, to be aware of their inner selves and to hear their inner-feeling voices.
2. We should teach people to *transcend their cultural conditioning* and become world citizens.
3. We should help people *discover their vocation in life*, their calling, fate or destiny. This is especially focused on finding the right career and the right mate.
4. We should teach people that *life is precious*, that there is joy to be experienced in life, and if people are open to seeing the good and joyous in all kinds of situations, it makes life worth living.
5. We must *accept the person* as he or she is and help the person learn their inner nature. From real knowledge of aptitudes and limitations we can know what to build upon, what potentials are really there.
6. We must see that the person's *basic needs are satisfied*. This includes safety, belongingness, and esteem needs.
7. We should *refreshen consciousness*, teaching the person to appreciate beauty and the other good things in nature and in living.
8. We should teach people that *controls are good*, and complete abandon is bad. It takes control to improve the quality of life in all areas.
9. We should teach people to transcend the trifling problems and *grapple with the serious problems in life*. These include the problems of injustice, of pain, suffering, and death.
10. We must teach people to be *good choosers*. They must be given practice in making good choices.



## Overview

The **Big Five personality traits** can be *summarized* as follows (see details below):

**Openness to experience** - Appreciation for art, emotion, adventure, unusual ideas; imagination and curiosity (vs conservatism).

**Conscientiousness** - A tendency to show self-discipline, act dutifully, and aim for achievement (spontaneousness vs planned behaviour).

**Extraversion** - Energy, surgency, and the tendency to seek stimulation and the company of others.

**Agreeableness** - A tendency to be compassionate and cooperative rather than suspicious and antagonistic towards others (individualism vs cooperative solutions).

**Neuroticism** - A tendency to easily experience unpleasant emotions such as anger, anxiety, depression, or vulnerability (emotional stability to stimuli).

These traits are sometimes referred to as the OCEAN model of personality because of the acronym composed of their initial letters. They are often measured as percentile scores, with the average mark at 50%; so for example, a Conscientiousness rating in the 80th percentile indicates a greater than average sense of responsibility and orderliness, while an Extraversion rating in the 5th percentile indicates an exceptional need for solitude and quiet.

[http://en.wikipedia.org/wiki/Big\\_Five\\_personality\\_traits](http://en.wikipedia.org/wiki/Big_Five_personality_traits)