

Ronald E Riggio Ph.D. Cutting-Edge Leadership

#### There's Magic In Your Smile

How Smiling Affects Your Brain

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"Sometimes your joy is the source of your smile, but sometimes your smile can be the source of your joy." ~Thich Nhat Hanh

It's a rough morning. First, my alarm doesn't go off. Then I'm late getting my son to school because another driver decides to roll into me. It doesn't damage my car, but it completely wrecks my mood. Then I get to my doctors appointment only to realize I'm an hour early. Just great. It must be a case of the Mondays!

I decide to pop into little French cafe around the corner to grab a cup of tea while I'm waiting. As I sit under my little gray cloud, my pretty, young server Colette flashes me a dazzling smile that sticks there for the entire interaction. I can't help but smile back. In fact, I even catch myself smiling while washing my hands in the bathroom. Suddenly my day doesn't seem so bad. I finish my tea and head to my appointment equipped with a grin on my face, feeling as though I've slipped on a pair of rose-colored glasses. Today's lesson? It turns out that when I smile, the world smiles back.

Scientist and <u>spiritual</u> teachers alike agree that the simple act can transform you and the world around you. Current research (and common sense) shows us that a smile is contagious (1). It can make us appear more attractive to others. It lifts our mood as well as the moods of those around us. (Merci, Colette.) And it can even lengthen our lives (2). So before you read on, slap a nice, genuine smile on that face of yours. You'll thank me later.

## **How Smiling Affects Your Brain**

Each time you smile you throw a little feel-good party in your brain. The act of smiling activates neural messaging that benefits your <u>health</u> and <u>happiness</u>.

For starters, smiling activates the release of neuropeptides that work toward fighting off stress (3). Neuropeptides are tiny molecules that allow neurons to communicate. They facilitate messaging to the whole body when we are happy, sad, angry, depressed, excited. The feel good neurotransmitters dopamine, endorphins and serotonin are all

released when a smile flashes across your face as well (4). This not only relaxes your body, but it can lower your heart rate and blood pressure.

The endorphins also act as a natural pain reliever - 100% organically and without the potential negative side effects of synthetic concoctions (4).

Finally, the serotonin release brought on by your smile serves as an anti-depressant/mood lifter (5). Many of today's pharmaceutical anti-depressants also influence the levels of serotonin in your brain, but with a smile, you again don't have to worry about negative side effects – and you don't need a prescription from your doctor.

## **How Smiling Affects Your Body**

You're actually better looking when you smile – and I'm not just trying to butter you up. When you smile, people treat you differently. You're viewed as attractive, reliable, relaxed and sincere. A study published in the journal Neuropsychologia reported that seeing an attractive smiling face activates your orbitofrontal cortex, the region in your brain that process sensory rewards. This suggests that when you view a person smiling, you actually feel rewarded.

It also explains the 2011 findings by researchers at the Face Research Laboratory at the University of Aberdeen, Scotland. Subjects were asked to rate smiling and attractiveness. They found that both men and women were more attracted to images of people who made eye contact and smiled than those who did not (6). If you don't believe me, see how many looks you get when you walk outside with that smile your wearing right now. (You're still smiling like I asked, right?)

# **How Smiling Affects Those Around You**

Did you know that your smile is actually contagious? The part of your brain that is responsible for your facial expression of smiling when happy or mimicking another's smile resides in the cingulate cortex, an <u>unconscious</u> automatic response area (7). In a Swedish study, subjects were shown pictures of several emotions: joy, <u>anger</u>, <u>fear</u> and surprise. When the picture of someone smiling was presented, the researchers asked the subjects to frown. Instead, they found that the facial expressions went directly to imitation of what subjects saw (8). It took conscious effort to turn that smile upside down. So if you're smiling at someone, it's likely they can't help but smile back. If they don't, they're making a conscious effort not to.

Looking at the bigger picture, each time you smile at a person, their brain coaxes them to return the favor. You are creating a symbiotic relationship that allows both of you to release feel good chemicals in your brain, activate reward centers, make you both more attractive and increase the chances of you both living longer, healthier lives.

My morning started a complete mess. Anyone in my shoes would have been frowning by the time they hit that café. We can't always control what happens to us, but I am 100% confident that gracing your face with a grin can seriously change your internal

and external experience. Your smile is something that should be worn often, so make it a priority to surround yourself with people, places and things that brighten your day. Vow to be the positive, happy person in your group of friends. Watch funny movies often and be sure to look people in the eye and show them your pearly whites. The world is simply a better place when you smile.

#### Footnotes:

- 1. Primitive emotional contagion. Hatfield, Elaine; Cacioppo, John T.; Rapson, Richard L. Clark, Margaret S. (Ed), (1992). Emotion and social behavior. Review of <u>personality</u> and social psychology, Vol. 14., (pp. 151-177). Thousand Oaks, CA, US: Sage Publications, Inc, xi, 311 pp.
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- 4. R.D. (2000). Neural correlates of conscious emotional experience. In R.D. Lane & L. Nadel (Eds.), <u>Cognitive neuroscience</u> of emotion (pp. 345–370). New York: Oxford University Press.
- 5. Karren KJ, et al. Mind/Body Health: The Effect of Attitudes, Emotions and Relationships. New York, N.Y.: Benjamin Cummings, 2010:461.
- 6. Facial attractiveness: evolutionary based research Phil <u>Trans</u> R Soc B June 12, 2011 366: 1638-1659.
- 7. O'Doherty, J., Winston, J., Critchley, H. Perrett, D., Burt, D.M., and Dolan R.J., (2003) Beauty in a smile: the role of medial orbitofrontal cortex in facial attractiveness. Neuropsychologia, 41, 147–155.
- 8. Sonnby–Borgström, M. (2002), Automatic mimicry reactions as related to differences in emotional <u>empathy</u>. Scandinavian Journal of Psychology, 43: 433–443.