

The Top 10 Insights from the Science of a Meaningful Life in 2012 by Jason Marsh, Lauren Klein, Jeremy Adam Smith

☐The science we cover here on Greater Good—aka, "the science of a meaningful life"—has exploded over the past 10 years, with many more studies published each year on gratitude, mindfulness, and our other core themes than we saw a decade ago.

□2012 was no exception. In fact, in the year just past, new findings added nuance, depth, and even some caveats to our understanding of the science of a meaningful life. Here are 10 of the scientific insights that made the biggest impression on us in 2012—the findings most likely to resonate in scientific journals and the public consciousness in the years to come, listed in roughly the order in which they were published.

There's a Personal Cost to Callousness. In March, researchers at the University of North Carolina, Chapel Hill, published a study in Psychological Science that should make anyone think twice before ignoring a homeless person or declining an appeal from a charity.

Daryl Cameron and Keith Payne found that after people were instructed to restrain feelings of compassion in the face of heart-wrenching images, those people later reported feeling less committed to moral principles. It was as if, by regulating compassion, the study participants sensed an inner conflict between valuing morality and living by their moral rules; to resolve that conflict, they seemed to tell themselves that those moral principles must not have been so important. Making that choice, argue Cameron and Payne, may encourage immoral behavior and even undermine our moral identity, inducing personal distress.

"Regulating compassion is often seen as motivated by self-interest, as when people keep money for themselves rather than donate it," write the researchers. "Yet our research suggests that regulating compassion might actually work against self-interest by forcing trade-offs within the individual's moral self-concept."

☐ High Status Brings Low Ethics. They may have more money, but it seems that the upper class are poorer in morality. In a series of seven studies, published in March in PNAS, researchers found that upper-class people are more likely than the lower class to break all kinds of rules—to cut off cars and pedestrians while driving, to help themselves to candy they know is meant for children, to report an impossible score in a game of chance to win cash they don't rightfully deserve.

□While the results surprised some, they didn't come out of nowhere: They were the latest, if perhaps the most damning, in a series of studies in which researchers, including Greater Good Science Center Faculty Director Dacher Keltner, have looked at the effects of status on morality and kind, helpful (or "pro-social") behavior.

□Previously, as we've reported, they've found that upper class people are less generous, less compassionate, and less empathic. (Many of these findings were summarized in a Greater Good article by Editor-in-Chief Jason Marsh, "Why Inequality is Bad for the One Percent," published in September.) Considered together, this line of research suggests not that the rich are inherently more unethical but that experiencing high status makes people more focused on themselves and feel less connected to others—an important lesson in this age of growing inequality.

"The rich aren't bad people, they just live in insular worlds," study co-author Paul Piff told Greater Good earlier this year. "But if you're able to reduce the extremes that exist between the haves and the have-nots, you're going to go a long way toward closing the compassion and empathy gap."

☐ Happiness is about Respect, Not Riches. And there was other discouraging news for the wealthy this year. Research has long suggested that money doesn't buy happiness; a study published in Psychological Science in July confirms that finding and goes a step further, changing the stakes of what we think of as high status: It turns out that if we're looking to money, we're looking in the wrong place.

□Instead, the study found that happiness is more strongly associated with the level of respect and admiration we receive from peers. The study's researchers, led by UC Berkeley's Cameron Anderson (and again including Keltner), refer to this level of respect and admiration as our "sociometric status," as opposed to socioeconomic status.

In one experiment, college students high in sociometric status in their group—their sorority, for example, or their ROTC group—were happier than their peers, whereas socioeconomic status didn't predict happiness. Similarly, a broader, nationwide survey, which boasted people from a variety of backgrounds, income, and education levels, found that those who felt accepted, liked, included, and welcomed in their local hierarchy were happier than those who were simply wealthier.

"You don't have to be rich to be happy," Anderson told Greater Good, "but instead be a valuable contributing member to your groups."

∏Shawn Gearhart

□Kindness Is Its Own Reward—Even to Toddlers. Several studies over the past six years have found that kids as young as 18 months old will spontaneously help people in need. But do they do so just to please adults? Apparently not: In July, researchers published evidence that their kindness is motivated by deep, perhaps innate, feelings of compassion for others.

☐The researchers found that toddlers' pupil sizes increased—a sign of concern—when they saw someone in need of help; their pupil size decreased when that person received helped. The kids' pupils got smaller when they were the ones who helped—but also when they watched someone else help. These results, published in Psychological Science, suggest that toddlers' kindness springs from genuine feelings of concern, not simply a concern for their own reputation.

This argument gains support from a study published around the same time in PLOS ONE. In that study, children just shy of their second birthday appeared happier when they gave away a treat than when they received a treat. What's more, they seemed even happier when they gave away one of their own treats than when they were allowed to give away a

treat that didn't belong to them. In other words, performing truly altruistic acts—acts that involve some kind of personal sacrifice—made the kids happier than helping others at no cost to themselves.
[]"While other studies have suggested adults are happier giving to others than to themselves and thatkids are motivated to help others spontaneously," Delia Fuhrmann, a Greater Good research assistant, wrote in August, "this is the first study to suggest that altruism is intrinsically rewarding even to very young kids, and that it makes them happier to give than to receive."
[]When a behavior is intrinsically rewarding like this, especially at the earliest stages of life, it suggests to scientists that it has deep evolutionary roots. Watch the video below to see one toddler going through the experiment.
We Can Train Ourselves to be More Compassionate. For decades, psychology was preoccupied with alleviating negative emotional states like depression, chronic anger, or anxiety. More recently, we've come to understand that we can also "treat" people to cultivate positive emotions and behaviors, and that traits like empathy and happiness are skills we can consciously develop over time.
$\hfill \mbox{But}$ what about compassion? This has been less investigated, which is why a study published in the July issue of the Journal of Happiness Studies stands to be so influential.
Stanford researcher Hooria Jazaieri and colleagues (including GGSC Science Director Emiliana Simon-Thomas) randomly assigned 100 adults to a nine-week compassion cultivation training program or to a waitlist control condition. Before and after taking the compassion course, participants completed surveys that "measured compassion for others, receiving compassion from others, and self-compassion."
The results have important implications: Across all three domains, participants showed big increases in compassion.
[]What's more, a study also published in July, in the journal Psychoneuroendocrinology, testifies to the benefits of a different compassion training, the Cognitively-Based Compassion Training program(CBCT), developed at Emory University. This study, whose co-authors include Emory's Thaddeus Pace and Brooke Dodson-Lavelle, found that the benefits of compassion training extend to a particularly vulnerable group: children in foster care, who showed lower anxiety and greater feelings of hopefulness after practicing CBCT.
☐More research needs to be done, but these papers clearly suggest that we can train people—in schools, workplaces, churches, and elsewhere—to ease suffering in themselves and others.
[(Both the CCT and the CBCT programs will be featured at the Greater Good Science Center's March 8 event, "Practicing Mindfulness & Compassion.")

☐Gratitude Sustains Relationships through Tough Times. Several studies have shown that feeling grateful for one's romantic partner can improve one's relationship. But this year,

new research by Amie Gordon built on that research significantly, factoring in another critical dimension: the extent to which people feel appreciated by their partner.

Synthesizing the science of successful relationships with recent research on gratitude, Gordon and her colleagues developed a new model of what it takes to sustain a good relationship. They found that feeling appreciated by our partner gives us a sense of security that allows us to focus on what we appreciate about him or her—which, in turn, make us more responsive to his or her needs and more committed to the relationship in general ... which then makes our partner feel more appreciated as well.

So when we hit a rocky patch, this research suggests, it's the upward spiral of gratitude that encourages us to risk vulnerability, tune into our partner's needs, and resolve the conflict, rather than turning away from him or her. "Feeling appreciated helps people with relationship maintenance by giving them the security they need to recognize they have a valuable relationship worth maintaining," write Gordon and her co-authors in their study, published in August in the Journal of Personality and Social Psychology. "Cultivating appreciation may be just what we need to hold onto healthy, happy relationships that thrive."

Humans Are Quicker to Cooperate than Compete. In a September paper published inNature, a group of Harvard researchers took on an age-old question: Are humans instinctively selfish or cooperative?

☐To get at an answer, they had more than 1,000 people play a game that required them to decide how much money to contribute to a common pool. In a blow to conventional wisdom, the researchers found that people who made their decision quickly—in less than 10 seconds—gave roughly 15 percent more to the pool than people who deliberated for more time. In a second study, the researchers instructed some people to make their decision in less than 10 seconds and other people to think for longer than that; again, they found that quick decisions led to more generosity while deliberating bred selfishness.

"These studies provide strong evidence that people, on average, have an initial impulse to behave cooperatively—and with continued reasoning, become more likely to behave selfishly," writes GGSC Science Director Emiliana Simon-Thomas. "The authors caution that their data do not prove that cooperation is more innate than selfishness at a genetic level—but they point out that life experience suggests that, in most cases, cooperation is advantageous, so that's generally not a bad place to start by default."

There's a Dark Side to Pursuing Happiness. As we often report here on Greater Good, happy people have it better: They've got more friends, they're more successful, and they live longer and healthier lives. But in May, Yale psychologist June Gruber wrote a Greater Good essay outlining "Four Ways Happiness Can Hurt You." Based on research Gruber and others have conducted over the past few years, she explained how feeling happy can actually make us less creative, less safe, and, in some cases, less able to connect with other people.

Then, in October, some of Gruber's collaborators published a study deepening the dark side to happiness: It seems that wanting to be happy might make us feel lonely.

□Led by UC Berkeley's Iris Mauss, the study, published in the journal Emotion, found that the more people value happiness, the more likely they are to feel lonely during stressful events. What's more, Mauss and her colleagues found that inducing people to value happiness increases feelings of loneliness and even causes a hormonal response

associated with loneliness—troubling news given how much emphasis our culture places on happiness, particularly through the media.

□Why this effect? The researchers argue that, at least in the West, the more people value happiness, the more likely they are to focus on the self—often at the expense of connecting with others, and those social connections are a key to happiness. "Therefore," they write in their Emotion paper, "it may be that to reap the benefits of happiness people should want it less."

Parenthood Actually Does Make Most—but Not All—People Happier. American parents tend to say that parenthood is stressful and hard on marriages, a feeling seemingly confirmed by many studies. One 2004 paper even found that moms prefer watching TV, shopping, and cooking to parenting their children. These findings led to a spate of media coverage claiming that parenthood will screw up your life.

But most of these studies have had a weakness: They didn't directly compare the well-being of parents to that of non-parents. Moreover, they were contradicted by many other studies suggesting that men and women can find tremendous meaning and satisfaction in parenthood, even despite high stress levels.

☐To correct for these weaknesses, psychologist S. Katherine Nelson and colleagues (including GGSC friend Sonja Lyubomirsky) ran three studies. The first used the massive World Values Survey to compare the happiness of parents to non-parents; the second tested moment-to-moment happiness of both parents and non-parents; the third looked specifically at how parents felt about taking care of children, compared to other daily activities.

☐ Taken together, these three studies found that, overall, parents seem to be happier and more satisfied with their lives—and that as a group they derived tremendous meaning and positive feelings from parenting.

☐ However, these findings, published in November by Psychological Science, come with several rather important caveats.

First, parenthood makes men happier than women—quite a bit happier, though mothers still reported less depression and more positive emotion than did child-free women. And contrary to conventional wisdom, single parenthood does not automatically lead to unhappiness. Parents without a partner did tend to be less happy than child-free peers—but they also reported fewer depressive symptoms than non-parents without a partner, largely, it seems, because they derived more meaning from their lives.

□Kindness Makes Kids Popular. In some ways, researcher Kristin Layous and her colleagues are like everyone in middle school: They pay attention to the popular kids. But their research stood out this year for how it explored what makes those kids popular in the first place.

The researchers gave more than 400 students one of two simple tasks: Every week for four weeks, they were either to perform three acts of kindness or visit three places. At the end of the four weeks, all the kids in the study, who ranged in age from 9 to 11, reported greater happiness than they had before, and more of their peers said they wanted to spend time with them. But the kind kids saw a much greater spike in their popularity, gaining an average of 1.5 friends—roughly twice as many as their counterparts.

☐In other words, the results, published in December by PLOS ONE, offer perhaps the most convincing argument you could make to a tween for why they should share their lunch with someone or give their mom a hug when she's feeling stressed (two of the kind acts students said they performed): Kids who are kind to others are more well-liked, helping their own popularity even as they help other people.

□What's more, Layous and her colleagues point out that, according to prior research, kids who are well-liked are less likely to bully and more likely to do nice things for others, and classrooms with an even distribution of popularity have higher average mental health. So a lesson for teachers: For a classroom of happy kids, consider adding to your curriculum the purposeful practice of pro-social behavior.