

In 2018, a tragic period enveloped the University of Bristol, when several students committed suicide related to work stress. Suicide is usually the ultimate culmination of a crisis in mental health, but these students weren't alone in feeling extreme pressure: across the campus there was a pervasive sense that the general student body was not coping with the demands of higher education. My own tutee students, whom I met on a regular basis, were reporting poor mental health or asking for extensions because they were unable to meet deadlines that were stressing them out. They were overly obsessed with marks and other performance outcomes, and this impacted not only on them, but also on the teaching and support staff who were increasingly dealing with alleviating student anxiety. Students wanted more support that most felt was lacking and, in an effort to deal with the issue, the university had invested heavily, making more provision for mental health services. The problem with this strategy, however, is that by the time someone seeks out professional services, they are already at a crisis point. I felt compelled to do something.

At the time, Bristol University was described in the British press as a 'toxic' environment, but this was an unfair label as every higher education institution was, and still is, experiencing a similar mental health crisis. Even in the Ivy League universities in the United States, there was a problem, as I discovered when I became aware of a course on positive psychology that had become the most popular at Yale in the spring of 2018. On reading about the course, I was somewhat sceptical that simple interventions could make much difference until I learned that Yale's 'Psychology and the Good Life' course was being delivered by a colleague of mine, Laurie Santos, who I knew would not associate herself with anything flaky.

That autumn term of 2018, I decided to try delivering a free lunchtime series of lectures, 'The Science of Happiness', based on the Yale course. Even though this pilot was not credit-bearing, more than 500 students gave up their Wednesday lunchtimes to attend. That was unusual as, in my experience, students rarely give up time or expend effort to undertake activities unless they are awarded credit or incentives. There would be 10 lectures, and everyone was requested to fill in self-report questionnaires assessing various mental health dimensions both before and after the course, to determine whether there had been any impact and, if so, how much.

The Science of Happiness had clearly piqued interest as indicated by the audience size, but I was still nervous. This was not my area of academic expertise and there was heightened sensitivity following the media attention over recent tragic events on campus. What were the students' expectations? Talking about mental health seemed hazardous. Would I trigger adverse reactions simply by discussing these issues?

Despite my initial reservations, the final feedback after the course ended was overwhelmingly positive. That was gratifying but, as a scientist, I like hard evidence. What would the questionnaires tell us? The analysis of the before and after scores revealed that there had been a 10-15 per cent positive increase in mental wellbeing across the different measures of wellbeing, anxiety and loneliness. That may not sound much but it was the average, and a significant impact in the field of interventions. Who wouldn't want to be 15 per cent happier, healthier or wealthier? I was no longer a sceptic; I was a convert. I would stop focusing on developmental psychology, my own area of research, and concentrate on making students happier. Even a 15 per cent improvement might lead to a degree of prevention that was better than dealing with a student who was already struggling.

The following year, we launched a credit-bearing course for first-year students who had room in their curriculum schedule to take an open unit, which has now been running for five years. These psychoeducational courses are not new and predate my efforts by at least a decade. But what makes the Bristol psychoeducational course unique (and I believe this is still the case) is that we persuaded the university to allow a credit-bearing course that had no graded examinations but was accredited based on engagement alone. Not only was I convinced by compelling arguments for why graded assessment is the wrong way to educate, but it would have been hypocritical of me to lecture about the failings of an education system based solely on assessment, and then give students an exam to determine if they had engaged. Rather, engagement required regular weekly attendance, meeting in peer-mentored small groups, but also undertaking positive psychology exercises and journaling about their experiences so that we could track progress. Again, to test the impact of the course, students were asked to fill in the various psychometric questionnaires to give us an insight to impact.

Meditation stops you thinking negative thoughts. Not exactly a scientific explanation

We now have five years' worth of data and have published peer-reviewed scientific papers on evaluation of the course. As with the initial pilot, the consistent finding is that there is, on average, a 10-15 per cent significant increase in positive mental wellbeing over the duration of the course. The course improves mental wellbeing but there are limitations. Our most recent analysis over the longer term shows that the positive benefits we generate during the course, and the two months after, are lost within a year, returning to previous baseline scores, unless the students maintain some of the recommended activities. However, in those students who kept practising at least one of the positive psychology interventions (PPIs) such as journaling, meditation, exercise, expressing gratitude or any of the other evidence-based activities, they maintained their benefits up to two years later.

Why do interventions work and why do they stop working? As to the first question, there are countless self-help books promoting PPIs, but the level of explanation is either missing or tends to be circular. Acts of kindness work because they make you feel better. Meditation calms the mind and stops you thinking negative thoughts. Not exactly a scientific explanation or revelation. Even though I had largely put my experimental work with children on hold because of the demands of teaching such a large course, I was still intellectually intrigued by the same basic theoretical question that has always motivated my research. What is the mechanism underlying positive psychology?

There are several plausible hypotheses out there from established academics in the field that explain some of the activities, but they lack a unifying thread that I thought must be operating across the board. I started considering the wide and diverse range of PPIs to see if there was any discernible pattern that might suggest underlying mechanisms. Two years ago, I had an insight and I think the answer can be found in the way we focus on our self.

In my role as a developmental psychologist, I see change and continuity everywhere in relation to human thought and behaviour. For some time, I have been fascinated by the concept of the self and how it emerges but must change over the course of a lifetime. I believe earlier childhood notions lay the foundation for later cognition which is why development is so critical to understanding adults. My most recent work concentrated on how ownership and possessions play major roles in our concept of self, and I was particularly interested in acts of sharing among children. Specifically, we had completed a set of studies demonstrating that, when children are instructed to talk about themselves, they thought about their own possessions differently and became less willing to share with others. Emphasising their self had made these children more selfish. This got me thinking about the role of self-focus in happiness.

The most pernicious aspect of self-focus is the tendency to keep comparing ourselves to others

Infants start off with an egocentric view of the world – a term and concept introduced by the psychologist Jean Piaget. Egocentric individuals tend to perceive the world from their own perspective, and many studies have shown that young children are egocentric in the way they see the world, act, talk, think and behave with others. Normal development requires adopting a more allocentric – or other-based perspective in order to be accepted. The sense of self changes from early ebullient egocentrism to an increasing awareness of one's relative position in the social order. Children may become more other-focused but that also includes unfavourable comparisons. They increasingly become self-aware and concerned about what others think about them – a concern that transitions into a preoccupation when they enter adolescence that never really goes away. As for adults, like many features of the human mind, earlier ways of thinking are never entirely abandoned. This is why our self-focus can become a 'curse', as the psychologist Mark Leary describes, feeding the inner critic who is constantly negatively evaluating our position in life.

One reason that self-focus can become a curse is that we are ignorant of the biases our brains operate with that lead us to make wrong decisions and comparisons. When it comes to happy choices, we want something because we think it will make us happy, but our predictions are inaccurate. We think events will be more impactful than they turn out to be, and we fail to appreciate how fast we get used to things, both good and bad. This is called a failure of affective forecasting which is why the psychologist Dan Gilbert explains that our tendency to 'stumble on happiness' is because our emotional predictions are so way off. We don't take into consideration how future circumstances will differ because we focus on just one element and we also forget how quickly we adapt to even the most pleasurable experiences. But the most pernicious aspect of self-focus is the tendency to keep comparing ourselves to others who seem to be leading happier lives. Social media is full of images of delicious plates of food, celebrity friends, exotic holidays, luxurious products, amazing parties and just about anything that qualifies as worthy of posting to bolster one's status. Is it any wonder that the individuals who are the most prone to social comparison are the ones who feel the worst after viewing social media? As Gore Vidal once quipped: 'Every time a friend succeeds, I die a little.'

If egocentric self-focus is problematic then maybe positive psychology works by altering our perspective to one that is more allocentric or 'other-focused'? To do so is challenging because it is not easy to step out of ourselves under normal circumstances. Our stream of conscious awareness is from the first-person, or egocentric, perspective and, indeed, it is nigh-on-impossible to imagine an alternative version because our sensory systems, thought processes and representation of our selves are coded as such to enable us to interact within the world as coherent entities.

Many PPIs such as sharing, acts of kindness, gratitude letters or volunteering are clearly directed towards enriching the lives of others, but how can we explain the benefits of solitary practices where the self seems to be the focus of attention? The explanation lies with the self-representation circuitry in the brain known as the default mode network (DMN). One of the surprising discoveries from the early days of brain imaging is that, when we are not task-focused, rather than becoming inactive, the brain's DMN goes into overdrive. Mind-wandering is commonly reported during bouts of DMN activity and, although that may be associated with positive daydreaming, we are also ruminating about unresolved problems that continue to concern us. According to one influential study that contacted people at random points of the day to ask them about what they were doing, what they were thinking and how they were feeling, people were more likely to be unhappy when their minds were wandering, which was about half of the waking day. Probably because they were focusing on their own predicaments.

If you focus on your problems, this can become difficult to control. There's no point trying to stop yourself ruminating because the very act of trying not to think about a problem increases the likelihood that this becomes the very thought that occupies your mind. This was first described in an 1863 essay by Fyodor Dostoyevsky, when he observed the effect of trying not to think; he wrote: 'Try to pose for yourself this task: not to think of a polar bear, and you will see that the cursed thing will come to mind every minute.' My late colleague Dan Wegner would go on to study this phenomenon called ironic thought suppression, which he explained resulted from two mechanisms: the tendency to increase the strength of the representation of a thought by the act of trying to suppress it, and a corresponding increased vigilance to monitor when the thought comes to the fore in consciousness. Ironic thought suppression is one reason why it can be so difficult to fall asleep. This is why one of our recommended activities on our Science of Happiness course is to journal on a regular basis because this helps to process information in a much more controlled and objective way, rather than succumbing to the torment of automatic thinking.

Other recommended activities that calibrate the level of self-focus also attenuate DMN activity. For example, mindfulness meditation advocates not trying to suppress spontaneous thoughts but rather deliberately turning attention to bodily sensations or external sounds. In this way, the spotlight of attention is directed away from the internal dialogue one is having with oneself. It is during such states that brain imaging studies reveal that various solitary interventions we recommend on the course – such as meditation or taking a walk in the country – are associated with lowered DMN activity and, correspondingly, less negative rumination. This is why achieving absorption or full immersion during optimal states of flow draws conscious awareness and attention out of egocentric preoccupation. To achieve states of flow, we recommend that students engage in activities that require a challenge that exceeds their skill level to an extent that they rise to the task, but do not feel overwhelmed by it. When individuals achieve flow states, their sense of self, and indeed time itself, appears to evaporate.

There are other more controversial ways to alter the egocentric self into one that is more allocentric. Currently, there is a growth in the use of psychedelics as a treatment for intractable depression and, so far, the initial findings from this emerging field are highly encouraging. One clinical study has shown that psychedelic-assisted therapy produced significant improvement in nearly three-quarters of patients who previously did not respond to conventional antidepressants. The primary mechanism of action of psychedelics is upon serotonin (5-HT_{2A}) receptors within the DMN which, in turn, produce profound alterations of consciousness, including modulations in the sense of self, sensory perception and emotion. Could the long-term benefits be something to do with altering the ego? One of the most common reports from those who have undergone psychedelic-assisted therapy, aside from euphoria and vivid hallucinations, is a lasting, profound sense of connection to other people, the environment, nature and the cosmos. Across a variety of psychedelics, the sense of self becomes more interconnected, which is why a recent review concluded that there was consistent acute disruption in the resting state of the DMN.

If chemically induced states of altered consciousness through psychedelics (which is currently still illegal in most places) is not your thing, then there are other ways to redress the balance between egocentrism and allocentrism. Engaging in group activities that generate synchronicity – such as rituals, dancing or singing in choirs – alter the sense of self and increase connection with others. But if group activities or psychedelic trips don't work for you, then take a rocket trip. One of the most moving emotional and lasting experiences, known as 'the overview effect', occurs to those lucky individuals given the opportunity to view our planet from outer space. As the astronaut Edgar Mitchell described it, it creates an 'explosion of awareness' and an 'overwhelming sense of oneness and connectedness ... accompanied by an ecstasy ... an epiphany.'

Back down on Earth, we can be happier when we simply acknowledge that we are all mortal, interconnected individuals who suffer personal losses and tragedies. No one's life is perfect, and indeed you need to experience unhappiness in order to recognise when things are going well. As the Stoic philosopher Epictetus put it: 'Men are disturbed not by things, but by the views which they take of things.' In other words, it's not what happens to you, but how you respond, that matters, and that's where positive psychology can make a difference – but only if you keep reminding yourself to get out of your own head.

Consider a problem that is currently bothering you. A real problem – not a hypothetical one or a world problem beyond your control. Find something that makes you unhappy and then say to yourself: 'I am worried about [whatever it is] because [whatever the reason may be] and this makes me upset.' Now repeat the exercise but this time don't use egocentric or first-person terms such as 'I' or 'me'. Rather use your name and non-first-person language such as: 'Bruce is worried about his [whatever it is] problem and this makes him upset.'

Speaking in non-first-person language should automatically transpose you out of the egocentric perspective to one that is other or allocentric, making the problem seem less.