

# WELL-BEING is a SKILL

## Richard Davidson

Richard Davidson: Thank you, thank you all! It's really an honor and pleasure to be here in Vienna. The last time I was in Vienna I was a graduate student and visiting the Freud House making a pilgrimage there. Things have changed in the intervening years. The title of the presentation that I'll give you tonight is "Wellbeing is a skill". I hope to convince to you by the end of this evening that this is really a reasonable way of thinking about wellbeing. I am a neuroscientist and psychologist by training. Early on in my career I was taken with the question of why is it that certain people are more vulnerable to life's slings and arrows, to the adversities in life, and why other people are more resilient. How can we nudge people along this continuum to help cultivate resilience and in those early days I was a graduate student in Harvard and after my second year of graduate school I went off to India to explore contemplative tradition in Asia. I was in India and Sri Lanka during that period. I was interested in looking in a first-person way at some of these meditation traditions because I had the fortune of being around people early in those days whose demeanor and whose presence was infectious. They were kind and warm-hearted. They were the kind of people that I wanted to be around and they weren't my professors at Harvard. I went off to India and Sri Lanka to search and I came back with a fervent aspiration to pursue research in this area but it was made very clear by my professors that if I wanted successful career in science that was a terrible way for me to begin my career. I'd better find something else to study. That led to a period of years when I became a closet meditator. I meditated in my personal life but it's fair to say that very few of my colleagues knew that I had a subterranean interest in and practice of meditation. I did research on the brain and emotion which we still very much do today that I'll say something about because it's really within that framework that a lot of the studies that we do on mediation occur. But then I had the great fortune in 1992 to meet for the first time His Holiness the Dalai Lama. And the Dalai Lama challenged me when I first met him and he said "You've been using tools of modern neuroscience to study anxiety, depression, stress, and adversity. Why can you not use those same tools to study kindness and compassion. That was a wake-up call for me. So, we began to do that. Then I saw His Holiness again many times, but then in a meeting in 1995, his Holiness took me by the arm and said: "I want you to take practices from our tradition turn them into a secular form, investigate them, using the most rigorous tools of science and if you find that they are valuable disseminate them widely." And that has been my assignment for the rest of my life. It is what we've been doing and led to the birth of our center, the 'Center for Healthy Minds'. I'd like to share with you a few developments in neuroscience that were occurring in parallel that enabled this work to proceed. Were it not for these developments we wouldn't have been positioned to do this kind of work. I'd like to name a few of these themes because they are really important and they provide a framework and a background for how this whole topic is currently being approached. The first theme is something that I'm sure many of you have heard of and it is the word neuroplasticity. Neuroplasticity simply means that the brain changes in response to experience and in response to training. Most of the time our brains are being shaped by forces around us

about which we have little control of and often little awareness. Our brains are being shaped wittingly or unwittingly, most of the time unwittingly. The invitation of all of this is that we can take more responsibility for our own brains by transforming our minds. When we begin to cultivate wholesome qualities of mind what we and other scientists have found is that our brains begin to change. And the changes that we see in our brain underlies these qualities that then allows them to endure and affect every part of our lives. The first theme is neuroplasticity. The second theme is the equivalent of neuroplasticity in the realm of genomics. How many of you have heard of epigenetics? Wow, many people! Okay! Epigenetics is the science of how genes are regulated. We all come into the world with a fixed complement of base pairs of that is our DNA. For the most part that's not going to change but the real change is the extent to which the gene is turned on or turned off. Every gene has a little volume control so to speak. And that volume control is very dynamic. It can be impacted by experience and impacted by training. We've shown over the last couple of years that individuals who have been long-term meditators can change their gene expression in their epigenetics in a very short period of time. You can bring them into the laboratory and have them do a day of intensive meditation practice and within an eight-hour period we actually see evidence of epigenetic change. Moreover, in very recent work we've shown that there are epigenetic marks that are associated with aging. As we age the molecular machinery in our body begins to change. On average, as you age, people show these changes in epigenetics that characterize the aging of the cells. It's like marks on a tree as the tree ages. It turns out that some people have molecular machinery which ages more quickly compared to their chronological age and other people have molecular machinery which ages more slowly compared to their chronological age. So, we asked a simple question whether meditation can actually slow the rate at which the molecular machinery of the body ages. The answer is that it remarkably can. People who have been doing long-term meditation practice show slower molecular aging compared to those who have not been practicing. These are giving us clues about some of the biological processes which are important and allow the understanding of how transforming the mind may impact the brain and the body. Let me describe a third theme which is probably most controversial among these developments in modern science but is one that is particularly exciting and we think really important in understanding how these contemplative practices might work and why we should be thinking of wellbeing as a skill. This third theme I describe as 'innate basic goodness'. Human beings come into the world with innate basic goodness. What we mean by this is that if early in life a baby is given a choice between an interaction which is warm-hearted, cooperative, loving, nurturant compared to an interaction which is selfish, aggressive, angry, the infant will prefer the warmhearted, cooperative interaction. There is very good evidence to suggest that the vast majority of infants, meaning 98 % of infants, prefer the prosocial, warmhearted, cooperative interaction. When we reflect on this it is kind of obvious. There are lots of people here for a talk on wellbeing. I bet if this was a talk on how to cultivate increased anger there would be very few people that would show up. We all have the same wish to be happy and to be free of suffering and this emerges from the innate basic goodness. There are some contemplative practices which were designed to contemplate kindness and compassion. When we look at these practices we can see that they are not creating these emotional states out of nowhere but rather they're reminding us, they're familiarizing ourselves with our basic innate nature. This is who we are. We are getting in touch with our core characteristics. In this sense we can think of kindness and compassion in the same way that scientists think of language. We all come into the world with a capacity for language but in order for that capacity to be expressed, we need a

linguistic community to nurture that capacity. The same is probably true with kindness and compassion. It is there from the start but in order for it to be developed, in order for it to flourish, it needs to be nurtured. Before the end of this we will do a little practice where we can all get a taste of this, I think, but we will do that in a few minutes. Let me now move on and describe a framework for wellbeing that we have been developing in our center. This is a framework that integrates the scientific research and also perspectives that we derive from the contemplative traditions. According to this model there are four major constituents of wellbeing. I would like to go through each of these and just say a little about them. The first constituent of wellbeing may surprise some people because it's not typically included in a list of characteristics of wellbeing. The first and most basic characteristic of wellbeing is awareness. A wandering mind is an unhappy mind. Awareness is something that we are all endowed with. When we can attend, when we can deploy our awareness in a way that is intentional— there is very good scientific evidence for this — we consistently report higher levels of happiness and wellbeing. There are findings in the United States that have been obtained in a very famous study was published in a very prestigious journal a few years ago. They used smartphones to query people as they were out and about in the world and they asked them three questions. The first question was: What are you doing right now? And you had to check off from a list of activities. Second question: Where is your mind right now? Is it focused on what you're doing or is it focused elsewhere. Third question: Right now, at this very instant, how happy or unhappy are you? You had to rate with a single number. Those were the three questions. Here are the findings. The average American adult — I don't know how it is in Vienna, I suspect it's similar — spends 74% of his or her waking life not paying attention to that they are doing. When they are not paying attention what they are doing is being unhappy. Even if what they are doing is kind of boring, even if they're doing their laundry, if they are distracted they are less happy than when they are attentive. We can do better. That is something I'm very convinced of. In 1890 William James, the first-grade American psychologist, wrote a two-volume tome called the principles of psychology. He has a whole chapter on attention in that book. He said the faculty of bringing back wandering attention over and over again is the very root of judgement, character and will. Then James went on to say that in education which can proof this faculty would be the education par excellence. He italicized the par excellence in the original edition. I think if William James would have had more contact with the contemplative traditions he would have instantaneously seen that these practices, if nothing else, are vehicles for educating attention. The first constituent of wellbeing is awareness. The second constituent of wellbeing is connection. Connection refers to the emotions which form the basis for successful, harmonious social relationships. Emotions like gratitude and appreciation, kindness, compassion. There is a wealth of evidence now showing that those emotions and the expression particularly of kindness to others is among the most powerful ways of cultivating wellbeing. This of course is central to the Dalai Lama's message to the world. I should just say that for each of these different constituents of wellbeing we know something about the brain circuits that are important for each of these and we know that the brain circuits for each of these core elements of wellbeing show plasticity. They are impacted by experience and they can be modified through training. I've told you about awareness and a bit about connection. The third constituent of wellbeing we call insight. We all carry around in our heads a narrative about who we are, about this thing or this entity we call self. What is the self? When we begin to investigate this using contemplative practices we directly experience that the self is not all that it's cracked up to be. At the very extreme we have people with depression who have a narrative about themselves that is quite

negative. A narrative about their low self-esteem and low self-worth and they actually believe the narrative, they believe these thoughts are a true depiction of who they are. So, insight is really about developing a healthy relationship to this narrative and to understand that these thoughts from which we construct this illusion of ourselves is really just a pile of thoughts. They are no different than any other kind of thoughts. When we can directly experience that it's quite liberating. Taking these thoughts too seriously is a path to suffering. The third constituent of wellbeing is insight into the self. The fourth constituent of wellbeing we call purpose. We know that people who report having a higher purpose, a kind of true north toward which their life is directed report consistently higher levels of wellbeing. Moreover, research has been done with people in their sixties, seventies and eighties. It turns out that purpose in life is the best psychological prediction of longevity than any other psychological characteristic that's been investigated. People at age sixty who report a strong sense of purpose in their lives live longer compared with those who do not. The data there are very, very strong. What's most important here is aligning our everyday behavior with our sense of purpose. People who particularly report that the activities in which they engage on a regular basis are consistent with their central purpose in life are the ones whose wellbeing really flourishes. Each of these constituents of wellbeing shows plasticity. We know that the circuits associated with them can be trained. This leads us inevitably to the conclusion that wellbeing is best regarded as a skill. One of the really cool things that have been discovered that I alluded to in the epigenetics description earlier is this: People who report higher levels of wellbeing turn out to be physically healthy. Now this doesn't mean that this is true for everyone, there are going to be exceptions but if you test thousands of people and look at their relation between their wellbeing and their physical health on average those are positively associated. The best evidence for this comes from a series of studies that have been done in the UK on British civil servants. There is a famous series of studies that have demonstrated this. This leads to the conjecture that when we cultivate wellbeing, when we improve it through these simple practices, we can actually have impact on our physical health. We know that stress hormones can be altered. We know that inflammation and the biological mechanisms of inflammation which are so important for many chronic illnesses can be modulated by these simple kinds of mental exercises that originally came from the contemplative traditions. We have the vision that at some future point in time - that we believe will not be too long from now - that a large segment of the population will view mental exercise in the same way that we view physical exercise today. Most people in most countries today understand physical exercise is something good for our health. If you go back fifty years that wasn't the case. The scientific evidence has played an important role in that cultural shift. Many of us now incorporate elements of physical exercise into our weekly routine. If we understood the precious resource that we have as human beings of these extraordinary things that we call mind and the brain that is somehow associated with it we would treat it with more respect. We have all learned to brush our teeth a few times a day and yet we don't care for our minds in the way that they deserve. The invitation and the plea, really from a public health perspective and also from the perspective of the sanity and survival and the flourishing of our planet, we need to cultivate these qualities of wellbeing. One of the changes that happens is - as we particularly for this insight constituent understand the nature of this construction that we call the self - that we recognize that we are much more interconnected, not just with others but also with our environments, with the planet. This we believe will lead us to treat others and the planet with more respect. I think most people would agree that the world can use a little bit more of that. This chain really begins with our own minds. If we all did a little bit of

practice of this sort, it really doesn't take much to begin to change the brain. We've actually seen in our laboratory that just seven hours of practice, thirty minutes a day for two weeks, is enough to produce a discernable, measurable change in the brain. Now it doesn't mean that those changes will endure. We all know that if we go to the gym for two weeks and work out and we stop exercising after that those changes will fade pretty quickly. The same is true with these qualities. Our vision is that this can become a lifelong skill just as we all have habits of personal hygiene, physical hygiene, we will develop habits of personal mental hygiene. I'd like to end now with a short period of practice to give everyone a taste. First of all, let me ask: How many people in the audience meditate on a regular basis, say at least a few times a week? Wow, okay, wonderful! And how many people have never meditated and don't be shy about raising your hands? Okay, that's wonderful too! With your permission I will lead you through a very simple practice. Let's put down our devices and our pens and paper if we have them. Let's please all sit in an upright posture to the extent that you can in these chairs. We like to keep our spines straight but not too tight, relaxed. For those who are standing – standing is a wonderful posture in meditation – that is fine too. But I think everyone is sitting, almost everyone. Let's bring awareness into our bodies. Our minds are embodied. Let's simply bring awareness to our feet. Notice a sense of groundedness and a sense of stillness as we begin to settle. As we begin to bring awareness into different parts of our body, simply notice if you're having pleasant sensations, unpleasant sensations, neutral sensations. It doesn't matter. Simply what matters is awareness spending a few moments resting in us. As our minds begin to settle and as our hearts begin to be a little more open, one of the important things that we do in the beginning of any period of practice is that we reflect on our motivation. *Why are we here? What brought us all together this evening?* We reflect on how a calm mind and an open and warm heart maybe is of benefit not only for ourselves but for all the other beings that we touch. As we reflect a little on this motivation let's bring to mind a loved one. It could be a family member, a friend, it could even be an animal, a pet. Simply bring this being into your mind and your heart. As we bring them into our mind and our heart we wish them happiness and we wish them to be free of suffering. We can use a simple phrase or two:

*May you enjoy happiness and its causes.  
May you be free of suffering and its causes.*

We can say that phrase a few times and then simply let the phrase go and rest.

*May you enjoy happiness and its causes.  
May you be free of suffering and its causes.*

Now let's each bring at least one other person in this room into our minds and our hearts. It could be someone you know, it could be someone you just met or it could be someone that you don't know that you've just seen. Let's do the same thing for that person or persons. As we bring them into our minds and our hearts.

*May you enjoy happiness and its causes.  
May you be free of suffering and its causes.*

You can say the phrases a couple of times and simply let them go and rest. As we transition out of this practice for those of you whose eyes are closed, please open them and you can

stop meditating. But preserve this quality of awareness and simply rest in this warmhearted, loving awareness that is at the core of this precious human birth that we all share. Thank you very much!