

## Gross National Happiness Conference Panel Three: Scaling Happiness and Health

[MUSIC PLAYING]

KINGA TSHERING: Good afternoon. Welcome back for what we have-- one of the final and the best sessions for this Happiness Conference. The session panel team, we kept it very simple. Scaling Happiness and Health-- Translating Science to Application. And for this, we have Dr. Vish here, who is the director of the Health and Happiness Center at Harvard T.H. Chan School of Public Health.

As I mentioned earlier, I'll not go into the bio. But I need to share you this. This was possible partly because of Vish. Vish has been, right from the beginning when the proposal was discussed-- I know Vish travels a lot, and in fact he was on the road I think, somewhere in India, and I was somewhere in Bhutan, and getting internet connection was a big challenge. But we managed to do it. And thank you so much, Vish, for encouraging this Happiness Conference.

And with this, without further ado, I wanted to request Vish to not only share on the conference team but also, in a way, synthesize the whole day of very, very high-level and expertise workshop that we had at the Health School yesterday. And along with that, I just wanted to share, in terms of I know we have a slightly lesser number of panelists, because we thought that towards the end you have to take away with a focused mind on what we are learning today. So, Vish, without further ado, if I could request you to kindly set the theme for this panel and moderate as well. Thank you.

KASISOMAYAJULA "VISH" VISWANATH: Great. Thank you. This is a late afternoon, and I thought I paid Kinga a lot of money so that he can put me first thing in the morning.

[LAUGHTER]

Apparently not. No, seriously, let me thank Kinga and his team for organizing this wonderful meeting. It's been an extremely educational and instructive panel sessions all day in the morning. It's amazing that you can pull together such a group of people from all over the world to talk about some of these issues that are of considerable concern to a lot of us.

So what we want to do, I think, in this panel is really raise some issues on scaling. Let me start with a story, somewhat apocryphal in the facts/ but who cares about facts, right, at this time of the day? So--

AUDIENCE: [INAUDIBLE]

KASISOMAYAJULA "VISH" VISWANATH: Right well, I don't know that I want to go there.

[LAUGHTER]

I already got into trouble by saying something about it yesterday at the workshop. I organized a [INAUDIBLE] yesterday. So a simple question-- how long does it take evidence to move from research settings to change practice?

AUDIENCE: 17 [INAUDIBLE] 400 Years

KASISOMAYAJULA "VISH" VISWANATH: Right. 400 years, 17 years. I can take the bigs now. So let me give you-- some of you are familiar with this-- the study of scurvy. The number of people who were affected by scurvy, especially the sailors-- now we are talking about the sailors. Tens of thousands of sailors who used to die at sea when they developed scurvy. But the solution-- and actually, it's an accidental discovery, as most discoveries are-- was found by a doctor.

A physician found that in a lemon juice could potentially help. I think it's some that on the tail-end of the 15th century. But the actual implementation into practice took 500 years. Only in 1950s when we really figured out how to do this. In the meanwhile, within those 400-500, a few more tens of thousands, if not millions of people, died or suffered from scurvy.

Just think about that-- the implication of that. Subsequently, a number of studies have been done and this has been a major concern for most of us, that we are investing a lot of money in research, or research and development as they call it. We are not showing slides, but I have some data which shows virtually hundreds of billions of dollars. I think the last time I looked at it, it was something like \$1.3 trillion dollars across the world in research and development.

And this is either directly or indirectly public money, right? The question is, what do we owe the public from this investment they are making? And how long does it take the public to benefit from this investment that is being made?

So there are a number of studies that have been done, one of which is from Canada-- actually, Jonathan Balas and [? Bohem ?] have done one study which showed that something like it takes approximately, on average, 17 years, as someone prompted. It's your mom, I guess.

[LAUGHTER]

I have a message from her to you pretty soon here. So 17 years for an innovation from a research setting to come and change practice. And the data also from that study shows that only 14% of those findings ever reach the practice load-- only 14%.

So if you think about it and only 18% of the administrators and practitioners report using evidence-based. So here we are in this wonderful setting, talking about gross national happiness. And this very word, happiness, as we discussed yesterday, is being widely followed. The term resonates with a lot of people. But the question is, what do we do with it? How do we promote happiness?

So we have the Global Happiness Policy Report. Professor Helliwell spoke very eloquently today, this morning. But also he has been going all around the world, along with Richard Layard, and Jeff Sachs, and others, talking about promoting happiness in terms of policy and practice. But the simple question is, what do we do, really, that can promote happiness? And do they really know for sure what we do actually leads to the promotion of happiness?

The evidence is much mixed more mixed than you'd think. Now, you might say, well, who cares. As long as we can do these things, how does it really matter? Because we can continue to provide all kinds of practices-- the so-called best practices and continue to practice. But think about it-- how many of us want to use a drug that has not gone through rigorous testing? How many of us want to go to a practitioner who has not been trained and has not gone through that rigorous straining?

I bet you it will be very few of us are willing to take that chance, right? So why is it that we are unwilling to take that chance on ourselves but are all too willing to adopt policies, promote policies, promote actions, promote practices, that could potentially cause harm? And five years later, 10 years later, 15 years later, we say, oops, we made a mistake. And our history is replete with such types of innovations-- so-called innovations-- where ten--

I don't understand English, and I'm also an innumerate, so.

[LAUGHTER]

I'm giving her a tough time. She showed me three minutes, so. So our history's replete with these mistakes, where 15 years later, 20 years later, we say, oh, we made a mistake. Maybe we should not have done that.

The point is we will. Of course, we cannot. So if you think about it-- I often have these friendly debates with my colleagues in the School of Public Health who run randomized controlled trials, who strongly believe that randomized controlled trials are gold standard and any evidence other than randomized controlled trials is suspicious. And I'm thinking, I work with communities. My research is around issues of poverty and translational communications. And for me to go to a community and say, you will be a control community while I'll experiment someone else, takes more than hubris.

That's kind of an imperial arrogance that has led to these mistakes they have made historically in science. So the we can't ask the communities or partners to wait while we compile the evidence base. So that's the tension here. It's what is it we can do that will minimize mistakes or minimize the probability of making mistakes? But what is it we can do that we can help people today and don't tell them wait for 15 years, I will have a solution for you?

And this is a crux of the issue as we discuss and debate these issues. I think that's what worries me. This is what keeps me up in the night, to be very frank. There are some big challenges in the world-- big challenges.

Extreme poverty, 20%. And not a lot of people are benefiting from these biomedical and technological revolutions.

The question is, why is it that not everyone is benefiting from it? What are the obligations we have here? We had some wonderful examples on having this kind of a participatory approach in this lab in Bhutan that you are starting. That's one of the things that we have been pushing, this notion of bottom-up, demand-side-- acknowledging the demand-side, using this participatory approach to really think about policies, co-designing these policies, and ensuring that whatever we develop in these controlled research settings translates very well into the practice.

But whatever we do in terms of we learn in the practice world around issues of happiness, well-being, whatever you want to call, and bring it back to the research world. How do we create that safe space for researchers, and practitioners, and policy makers to work together in a very safe environment? So that's one of the biggest challenges I think we need to think about.

The second challenge is-- someone asked a question this morning about refugees. And so, my point is on migration, migration is going to be a big issue. It's not just about one issue. Poverty is a big issue. Inclusiveness is a big issue. And every time they do something like this, we need to ask the question-- and this is what I tell my colleagues, we need to ask the question-- we are here at the table, who is not at the table with us?

The whole idea of participation depends upon bringing in people who are not at the table-- the disenfranchised groups-- to be with us, to co-design the solutions-- in fact, co-characterize the problem first and then come up with appropriate designs. So that's, I think, one of the things we are struggling with in the world of translation-- how do we do this so that we can promote? And That's why, I think, when Kinga came and said it was so exciting to see this conference, because I think what they're trying to do, both as a policy and as a bottom-up feature in the community, is very important.

Let me make one last point before Meredith throws me off the forum here.

AUDIENCE: You just [INAUDIBLE].

KASISOMAYAJULA "VISH" VISWANATH: Right. Yeah, yeah. Perceived power-- but it's not real power.

[LAUGHTER]

So let me just say one last thing, I think, as we do this. I don't think we should get caught up too much about indices-- rankings of the countries. Indices are important. Quantification is important. It's not that it's not unimportant. But rankings are rhetorical devices. That's what Professor Helliwell was saying.

If they don't tell the ranking, nobody will talk about happiness-- nobody cares. So the whole idea in actually doing that ranking is actually get

people to talk, and then you actually have them discuss things in depth. That's the whole point of this. Not because somehow rankings are sacred, I think. So that's partly, quantification has its value, but not for the reasons you think it is.

So with that, let me go ahead and introduce the panel. First, we'll have-- I believe we'll go in the order it is in. So Alejandro Adler-- you can read his bio-- from Columbia University. He has been working quite a bit with Dr. Helliwell and others on education innovations. Go ahead.

ALEJANDRO ADLER: Sure, and thank you. That was-- it's quite the tremendous act to follow, Vish, but I'll take a good stab at it in a short 10 minutes. I think that first point you bring up of scientific and experimental rigor on the one hand, and the tension with impact on the other is one our team wrestles with a lot. Rigor, implying time, and careful experimental design, and so on, and sometimes leading to what we often call analysis paralysis, where you just analyze data, data, data. But then if you goes straight to impact, you might have a lot of impact, but the impact may be both positive and potentially reckless or null.

And I believe that as practicing academics, or academic practitioners, we need to find that delicate balance between rigor and impact. So what have we done in the realm of happiness and well-being vis a vis the translation of science to policy and eventually impact? We've seen that it's necessary to really answer three questions from the most theoretical, to the most statistical, and eventually the most really pragmatic and impactful solutions.

First and foremost, before we're going to even start to work with a community, we need to ask, what is it that we're talking about here? Is it happiness? Is it well-being? And the more and more the sciences of well-being, I'll call them, have advanced, we now know that there is no one definition. It's very useful to have a Cantril ladder for comparative purposes and to have a nice global ranking that is very attractive and get people in the room. But we need to know that being and happiness-- and we actually use both of those words so that there's not an or-- is multidimensional. It has elements of positive affect, engagement, healthy relationships, meaning, purpose, accomplishment, self-efficacy, self-determination, and the list goes on.

And why is this important? Because when you arrive with a full constellation of well-being domains to start to work with a community and you listen, you create a genuine dialogue and realize what is truly significant and important to the stakeholders with whom you're working. And we work specifically in education. And so we realize what is important when it comes to human flourishing to students, to teachers, to parents, to principals, superintendents, policymakers, so that we can arrive at a consensus and not be paternalistic or colonial about the entire enterprise, and say, here's a Cantril letter, and that's your happiness whether you like it or not. And wherever you put yourself on a 11-point Likert scale is going to define the rest of what we do at the government. That would be not only ridiculous but also just incredibly hubristic.

So it's very healthy, I think, to have a full constellation, as comprehensive as possible, when you start these kinds of work, and when you want to translate science to policy and not have a predefined model or theory. Secondly, measurement-- measurement is necessary. It's not sufficient, of course, but you need to know where a community is, whatever your community of impact is. Whether it's a family, a nation, or anywhere in between.

And again, it's necessary to co-construct these measurement instruments and have the full constellation of methodologies. So self-report has become the, quote, unquote, "gold standard." And that's very nice, but in a lot of cultures self-report doesn't really make sense. And in some communities, in Bhutan where we worked-- and once you start explaining a Likert scale or you're already contaminating the, quote, unquote, "response." And Northern India and Nepal likewise.

So I think having a multi-method, knowing that well-being and happiness can be measured in the most rigorous in time, and resource-intensive from the neuroscientific level, and seeing that the left prefrontal cortex and amygdala are involved in emotional regulation and positive affect, to biometric measures-- heart rate variability, cortisol levels, behavioral measures of whether people actually have healthy relationships, not just reporting them, self-report, of course, and then the blossoming big data revolution that really can be leveraged to measure well-being in real time. And there is a second component to measurement, which is not only co-constructing the measurement instruments, but really having the measurement have resonance with whomever the ultimate stakeholders and beneficiaries of whatever policy is. So having access to the data, knowing how to make sense of it, knowing how to track it, so that it's not something, again, abstract and imposed.

And finally, what is it that we're talking about? How do we measure it? The third question is, how do we increase it? And it's very easy to come with these nice, prepackaged copy-paste interventions that come from, whether it's the world of health, or education, or positive psychology, but it's absolutely essential to again have a multi-stakeholder engagement and realize what is already locally present that works. And identify the strengths and assets, socially, culturally, economic, that are already there. And synergistically combined with, quote, unquote, "best practices" with always having an absolute emphasis of adapting it to the local context and culture by being a facilitator rather than a trainer or a policy maker, and really involving every single one of the stakeholders.

And in our education work, again, it's having the students, and the teachers, and parents, and the principals, and the policymakers all around the table to say, what is it that makes us to you as outcomes, as, measurement and then as actual interventions? And I guess it's what I'll say. And then, it is, I think, irresponsible to go straight to policy, even if something has worked at a nation wide-scale in the US or in the UK, going to Bhutan to put a name on it, and saying, well, now, this is going to be policy, because it's not a vaccine. I mean, happiness and well-being is intrinsically cultural and sociopsychological, and so it needs to be fully embedded before it can be promoted via education, via health, and other interventions.

So the way we've always done is going from program. And whenever we do an initial program, we do try to be as rigorous within our city as possible. In education they don't take 15 to 17 years [INAUDIBLE], normally more of a two to five-year horizon. And only then do we move from program to policy. And only after we see evidence at the policy level-- by the way, often programs, when they move to the policy level, get diluted. And whether it's because of lower treatment fidelity because of the magnitude, or bureaucracies, you need to know that this can actually work having the government being the implementer.

And only then do we actually go to the last part, which is going from policy to law. And that's, in our experience, the only way to ensure that whatever program that you translate into policy had the volition of whomever is in power, and that it is somewhat impermeable to different political and economic interests. So we've, including in Bhutan, been able to, in the world of education, see that well-being can be definable locally, can be measurable locally, can be buildable, especially in children and adolescents. And by the way, it really translates pretty reliably to enhanced academic performance, specifically on standardized exams, which is really the way we've been able to move the needle with a lot of policy people who care about standardized exams and only standardized exams, or re-election and standardized exams being a path for that.

And I'll close with saying, whether happiness and well-being is intrinsically valuable for some people or instrumentally valuable in that it leads to beneficial life outcomes, we like to have all of the results. Because whether you're an unenlightened minister of education who cares about the well-being of children or adolescents or a minister of education who cares about his or her political career re-election, we can show that promoting well-being, at least in schools, is a win-win. So that's how we've been able to translate science to policy and practice in an efficacious and efficient manner.

KASISOMAYAJULA "VISH" VISWANATH: Thank you, Alejandro. I'll ask you one question, then we'll go to others, and then we'll bring everyone back. So you said something very interesting. So I don't know how many of you caught that, but I did. So you said you want to promote happiness through education-- introduce happiness as one of the variables in promoting education. At the same time, you said, introducing those policies around happiness will improve academic achievement, especially around standardized tests.

Now, so is education about standardized tests? What should an education that includes, incorporates, well-being, happiness, look like?

ALEJANDRO ADLER: So my opinion is education should be about giving students the knowledge, skills, attitudes, and values that thrive across the lifespan. For me, that does boil down to giving educators, and hence students, the skills to flourish in life. So for happiness and well-being as the end result of education, together with traditional literacy, numeracy, science, is enough for me. But if a minister of education will

do it only because it raises standardized exams, I don't care why he or she is doing it, as long as they're doing it.

And that was a little bit of the debate we were having yesterday, which is just do it. Whether it's for political purposes, for standardized exams, for happiness, as long-- but yes, what is the purpose of education? Preparing students to thrive professionally and personally.

KASISOMAYAJULA "VISH" VISWANATH: And how do you know that what you are doing will lead to thriving? I mean how do you make those decisions?

ALEJANDRO ADLER: Oh, well, we measure it, and we measure it in cohort studies.

KASISOMAYAJULA "VISH" VISWANATH: Across the lifespan?

ALEJANDRO ADLER: Well, we don't have enough years, but, yes, we followed adolescence into early adulthood and into their 30s now. And we've seen increases in multidimensional well-being and lower uses of alcohol and substances, better marriages, and better performance eventually, also, in the workplace.

KASISOMAYAJULA "VISH" VISWANATH: So I'm not being mean to him. I'm just saying that kind of dilemmas we go through as we decide these things. These are the kind of real issues that people wrestle with. I'll come back to Alejandro and be mean to him later.

[LAUGHTER]

So let's go to Eric Coles. Eric is, as he described himself, a recovering economist. He was at the National Institutes of Health as a Health Economist, and then decided to change careers midway, come to the Harvard Chan School of Public Health. He's in the doctoral of Public Health Leadership program. And Eric is really thinking through, as some economists are thinking about these things, going beyond GDP into other measures of welfare and well-being, and happiness is being one of them. So Eric is a co-conspirator in crime. We are working together on a number of issues, including a white paper he led with me.

So Eric's going to talk about happiness without health, happiness without health. And I have a message from your mom. Apparently you are asked to come to Harvard so that you can completely reform the health care system. So hopefully you'll do that.

[LAUGHTER]

ERIC COLES: Yeah, it's a good start. Well, first, I want to thank Kinga and all the organizers. This has been a true honor to be here in front of you today, and I really appreciate it.

AUDIENCE: Yeah.

ERIC COLES: Yeah. I also think, before getting into kind of the translation between health and happiness, I recognized through all the

sessions today that health as a field, as a sector, has been kind of right below the surface, even dating back to the very opening statement by Dean Hempton here. He used Thomas Jefferson's famed quote from the Declaration of Independence. And the first right he says there is life. And I think that reflects a lot on the importance of the health sector and how important health is in this field have had happiness.

We also saw it to the very first panel here. John Helliwell's the World Happiness Report, they devoted the entire second chapter of the most recent book to using happiness as an indicator for health. They argue, I think very convincingly, that happiness or a well-being measure should be how we evaluate our health systems and how we allocate resources. To even the previous session before this, Professor Gershfield mentioned trying to build things to affect how we live, work, and play.

Well, I'm assuming that public health and how we define public health is affecting those-- the determinants within where we live, work, and play that affect our health. That's sort of the idea we call the social determinants of health. That's really our bread and butter. So I think in all these sessions today that we've heard, health is right below the surface of happiness. I think it's right, right there.

And I've got kind of my own opinions about where public health issues should be in promoting this. But before kind of getting into that and getting into the questions of translation that Vish brought up, I'd like to also take a step back and give more background about why health is important in this field of happiness. And I apologize. I'm from the US. It's going to be a little bit US-focused.

But I think here in US, which I assume a lot of people here are Americans, we're obviously going through a lot of problems right now. But one of the problems we don't speak about a lot is that life expectancy has actually decreased in the US over the last several years. It's actually the first time life expectancy has decreased since the AIDS epidemic. unheard of. It goes against a lot of kind of theories of pulp public health and about the progress we should be making.

A lot of that decrease in life expectancy is because of what have been termed diseases of despair-- basically alcoholism, suicide, addiction. Everyone's heard of the opioid epidemic, how that's ravaging a lot of communities in this country. And that's really driving a lot of the decreases in life expectancy, as well as tons of other problems. But I think that terminology is really interesting, diseases of despair. I think that gets at some of this happiness stuff we've been talking about a lot today. And my opinion here is that this country would benefit a lot from focusing more on happiness, addressing these diseases of despair.

We've also heard a few times about social media and people being addicted to their cell phones. There's some kind of more recent research kind of connecting use of social media to health outcomes, and that's also negative too. So there's lots of reasons to get off of your phone and off social media.

So I think there's a lot that can be connected between these fields of health and happiness. So getting back to what Vish was saying about the translation of science into research, we've been kind of studying a lot at the policy level, and I think we've kind of identified two gaps that are kind of really hindering and prohibiting science, medical research, and being translated into this happiness field.

So I'll kind of go through those two missing gaps, and then I'll close with my opinion if there's enough time. So I think the first question that is still unanswered is how health is included in these measurements of health. As we heard this morning, [INAUDIBLE] went through the domains of GNH-- Gross National Happiness-- and he mentioned health twice. I think it was really interesting. There's an entire domain that's focused on health, which is the physical health that most people kind of commonly think of. There's also one of the newer kind of innovative domains of psychological health.

And how we define that, I think it's really interesting. That that's on there twice-- the word health is on there twice and has much different measures from how we're measuring it and how it's being included. And then, actually, almost unfortunately, we haven't spoken a lot about there's a lot of other measures of health out there besides just Bhutan. The World Happiness Report, that's been mentioned a few times, uses a life satisfaction question that is very limited. It's a single question or two.

There's also tons of other measures. Like as was also mentioned, the conference we had yesterday, we brought in some practitioners of measuring health around the world, and they've been including health in different guises. So just [INAUDIBLE] here, there's the city of Somerville, Massachusetts-- I think it borders Cambridge actually-- they have had a happiness measure, which is, again, kind of focused on this lifestyle and fashion question. But they usually phrase it in terms of commuting-- in terms of how long it takes people to commute to work. That's, obviously, really important to those residents of Somerville, but it might not be to residents of Bhutan.

Also we had a practitioner yesterday from Santa Monica, California. They have their own measurement of health-- a kind of quality life indicator. And there's other domains that go into that, that are not just as Bhutan measured it. So what Santa Monica, California, has is they have a financial measure, again a physical health measure, a measure of environment, and a measure of education as well. So they don't have psychological health.

There's other places like the OECD that focuses on mental health. So how we include health in these measures of happiness varies tremendously. Which, I feel, personally, is unfortunate. Because in terms of the definition, which kind to goes on the current second gap in the literature, is the World Health Organization, which is one of these really broad UN organizations that focuses health, they have a definition of health which is really seen as the seminal definition within the field. And I have it written down here.

So they define health as "a state of complete physical, mental, and social well-being, and not merely the absence of disease or infirmity." Which that was written in 1946, which I think was tremendously succinct in that. But again, physical, mental, and social well-being. So they include a lot of these terms that others use in other ways, and there's no consistency there.

They also use the term well-being, which they've actually been attacked-- not attacked, but people had disagreed with this definition because of this use of well-being and how similar that is to happiness. And we just heard how, in a lot of academic literature, well-being and happiness are usually used synonymously, with well-being actually being preferred. So I think there's a lot that goes into that definition. And if you look at all these measures of happiness, whether it's Bhutan, or whether it's the OECD, or more like local measures, there's not a clear definition.

I have examples written down in front of me, but the point is that is there's a lot of variety in exactly how they're being defined. And personally I think a lot of that comes from how this field has developed. It has been mainly psychologists and economists. There haven't been a lot of health professionals, unfortunately, in this field. If you saw the first panel this morning, there's no kind of an MDs, there's no public health people there, and I think that's really lacking in this field.

So if I could just end briefly with my opinion about where I think happiness should be and kind of who should be responsible for it. I think we need a much stronger health sector and a much stronger influence of health. And I don't say that because I want to be selfish and have it all for the health, but I think there's a lot of resources that can be utilized if we focus this on the health problem. I have the data as globally, each year, we spend about \$7 and 1/2 trillion on health. I think if we are able to mobilize a fraction of to this area of happiness, it would be tremendous, and it would really be expanding in way beyond Bhutan, and could be really, really exciting.

And there's a lot of, obviously, getting back to where I started with, the diseases of despair. There's a lot of need for it here in the US. But I think it could be much more globally applicable if we make this more of a health issue. Thank you.

[APPLAUSE]

[INAUDIBLE]

KASISOMAYAJULA "VISH" VISWANATH: Thank you, Eric. That was very nicely done. So let me ask you a very unfair question.

[LAUGHTER]

I'm his advisor. I can do that. Poor guy. So you really ended it very nicely by saying that we focus too much on diseases of despair. On the other hand, we are talking about happiness. This entire conference is about happiness. Which is so far from despair, maybe it's an antonym in some ways.

If you look at our medical system, it's all organized around body parts and their problems-- all the specialization, everything. There is no doctor for happiness. There is no fellowship for happiness. So what do you think? How do you get from here to there?

ERIC COLES: Great questions. Yeah, I think there's a lot behind that. So first, I'm not a clinician. So I'm not an MD. So I don't know--

KASISOMAYAJULA "VISH" VISWANATH: That's why you can go ahead and say whatever want.

ERIC COLES: Yeah, exactly. So I can kind of [INAUDIBLE] that a little bit by just saying, there's been a lot of work that these social determinants of health actually are more important your health status than the clinical care you receive. Kind of where you live, work, and play, research says, is responsible for about 60% of your health status, while the care you receives only responsible for about 20%. And I think there's a growing recognition of that within the US and also globally.

I know state Medicaid programs across the country are now focusing more on social determinants of health. We're spending so much on health care, that all of this effort to decrease costs, I think an unexplored and untapped way to decrease costs is by focusing on these social determinants of health. So kind of getting to what Alejandro was saying about, I personally would feel that happiness, well-being, is the intrinsic goal in itself. While where we are right now, I think sometimes it needs to be used as an instrumental goal. And using that as an instrumental goal to the intrinsic goal of decreasing costs or improving more traditional health outcomes.

I think there's lots of arguments that can be made for why the health system should focus on health that are still in the health field and should be utilized much more often.

KASISOMAYAJULA "VISH" VISWANATH: Great. Thank you. Mr. Kaka. So Mr. Kaka is from Bhutan but now in England.

KAKA: Australia.

KASISOMAYAJULA "VISH" VISWANATH: Australia. Involved in education for a long time before he decided to go back to graduate school and do his doctorate. So he will speak about his [INAUDIBLE].

KAKA: Before I begin, I would like to thank the organizer for making this conference happen, and, of course, accepting me to be a part of this conference. This is really an honor and privilege for me to be here, especially in Harvard. Because, as a child, myself, I've heard Harvard is something really divine kind of school. And today I'm here, really being a part of Harvard. So that makes me really happy.

And the moment I shared my news with my colleagues that I'm going to Harvard, they seemed to be more excited than me. Oh, you're going to Harvard! How did you manage that? These are the questions that people ask.

So today I'm here. I'm very privileged to be with all these experts. I don't know whether I will be able to give you any insights on gross national happiness, but I can definitely share the Bhutan experience on infusing gross national happiness into the school system. This started sometimes in 2009 and '10 with the first democratically-elected government.

The first government was really very interested in infusing, integrating, and promoting gross national happiness values and philosophies into the school system, because they really believed. And his majesty even believed that the future of the nation are with the youth in schools. So the government believed that if you actually do not infuse the values, integrate the values, of gross national happiness in the school system, I think no government would be able to actually achieve the holistic aspiration of gross national happiness.

So with that background in mind, educating for gross national happiness was established. And I'm sure you were a part of that then. It was done with the proposal to do to make and enrich learning in the schools, to give a genuine and heartfelt purpose and context in education, and to make learning and curriculum more meaningful and more pleasurable. So that was the actual essence behind instituting educating for gross national happiness in Bhutan.

The ultimate aim through the project educating for gross national happiness was to produce school graduates as a genuine human being who through this system would be able to realize the full potential as a human being, who are caring for others, who are collegially literate, who are free of greed, and who would be able to live in harmony with nature and others. So that was the actual ultimate aim.

To be able to do that, when this project was instituted and started in 2009 and '10, for the first time in the history of Bhutan, all education practitioners-- the school principals and the district education officers-- were trained how they should infuse, integrate, and promote gross national happiness concepts, values, and philosophies into the school system. And later, in the course of following years, almost 80% to 90% of teachers were also trained to be able to infuse and integrate gross national happiness.

And the educational [INAUDIBLE] with the support of the international experts on gross national happiness, they kind of came up with what we called the five pathways to be able to integrate, infuse, and promote gross national happiness in the school system. And that was number one, meditation and mind training. To be able to enhance and improve the psychological well-being of the children, this has to be an integral part of the school system. So it was almost a mandatory that schools had started meditation and mind training starting from kindergarten schools to the year 12, and even to the tertiary institutions.

The second was our teachers were encouraged to infuse the values of GNH in the curriculum. GNH is not to be taught as a separate subject but to be infused in all the subjects wherever relevant, with the language, the

science, and mathematics, happiness-- the concept of happiness, the value of happiness-- to be infused in the curriculum. Then in the school system it's not just the classroom education that happens, but there are a lot of other programs happening, like sports, the music, the clubs, the other programs. So happiness to be consciously also infused in other programs as well, which was defined something called the broader learning domain in the school system.

And it was realized that in Bhutan, our teachers tends to be serious with anything that is actually assessed or tested. So it was also thought that if GNH-infused education had to be successful, it has to be holistically assessed. Because assessment which is done more through examination or [INAUDIBLE] kind of assessment, they don't really promote happiness. And there are also a lot of ideas being generated as how to infuse the philosophies and the values of gross national happiness if we actually make a revolution in terms of how students are assessed.

And the final one was all the teachers were also actually made to make our students media literate. Media literacy was given a lot of focus to be able to promote GNH. Because Bhutan then was actually getting exposed to a lot of media. Children were very excited with a lot of media coming in-- the television coming in, the Facebook, internet. So a lot of information coming in. Then children started believing in whatever they actually get through the media. So media literacy was one of the pathways that was initiated to be able to promote GNH in the school system.

And with this system, the minister of education with the profound idea of our first democratically-elected minister, [INAUDIBLE] Singh, he came up with the profound idea called ed greeneries to be promoted in the schools, which he called as natural greenery, social greenery, cultural greenery, intellectual greenery, academic community, aesthetic greenery, spiritual greenery, and moral greenery. He defined greenery not just in terms of color, this was a metaphor that he had used as some kind of sustainable education, where the moment a child or stranger enters a school, he can find the school is something welcoming.

Everything is neat, spick and span, clean, green. And then the moment somebody enters the school it interests the children and the teachers. They find it, really, the GNH being infused here. People are so polite, so courteous. And then, as they interact, you could see the culture which is in the the society inside the school. And the programs-- the minds of the children are really intellectual, academic programs are really GNH-infused.

And through that, people are able to actually identify what is really beautiful, what is good, or what is bad. The spiritual aspects of the children are really enhanced. And finally, children are really morally enhanced. They know what is good and bad, what is better and the best, what is good and more good-- all this. So these ed greeneries were some of the initiatives that have been instituted in the school system.

And of late I have learned that more than Bhutan-- Japan has, in fact, translated this ed greenery-- a book, a guideline actually written by the minister, [INAUDIBLE] into Japan. And it started in Japan. Probably, I

would be very interested to actually be able to find out how Japanese are doing these greeneries back in their country. I was also told that these greeneries are in fact translated into Spanish, Vietnamese, and German. This is really, really going to be interesting to see how Bhutanese version of these ed greeneries are actually translated into these languages and taking this very seriously in the school system. This was the latest news that I have [INAUDIBLE].

Having said this, it doesn't mean that everything in Bhutan the school system, the GNH is really infused so well. There are lot of challenges. our teachers doing well. To be able to do this, our teachers should be GNH-literate teachers, our principal and school leaders should be GNH-literate leaders. Are they really GNH-literate leaders? Are they really GNH-literate teachers?

Do they what GNH is? Do they believe in GNH? Are they able to practice GNH so that they not just preach, but they're also able to demonstrate what GNH is. And the students are able to see them as a model, where they can actually take in GNH from their teachers directly, not just through what they teach in the classroom, but through the practices that they see in their teachers.

So if this is not there, probably to be able to realize the visions that is set in the policies that is set is going to be very difficult. So because I have worked myself as the district education division officer some 5 years ago, I also worked as a principal and a teacher, I have later worked even in the ministry as education monitory officer-- I have seen through this process, and I know there are a lot of difficulties. Our teachers are not able to do that.

While that's the vision that is set. While that is the policy statement that has been made. But to be able to put that into practice is really difficult. So, knowing this, I am now in Australia.

[LAUGHTER]

Resigned from service, and I'm actually pursuing my PhD degree. And the topic is gross national happiness literacy. And this is my dream. I want to be able to frame and come up with GNH literacy and leadership framework. Very recently, before I came here, I had made a presentation of my confirmation of candidature. And of course they passed my candidature, confirmed the candidature, but it came up with a big condition-- the condition that your PhD topic is really very ambitious, and you need to really seriously look into and come back to us within a one month and try to convince us whether that is really achievable and doable within the period of your studies. I would like to share that with you just for information.

So my proposal is-- oh, I'm finished.

[LAUGHTER]

Sorry. I stop here. I finish with the first part. Maybe maybe I can leave it for the question.

KASISOMAYAJULA "VISH" VISWANATH: Yeah.

KAKA: More than the presentation, I'm scared of Dr. Vish asking a very difficult question.

[LAUGHTER]

KASISOMAYAJULA "VISH" VISWANATH: I do look like a very mean and nasty guy.

[LAUGHTER]

It's not the first time, It's not the last time. Let me ask you one question. I think we'll bring him back, Kinga, for his thesis presentation once he finishes his dissertation.

KAKA: That would be great.

KASISOMAYAJULA "VISH" VISWANATH: We can do that. But so here is the challenge I raised early. So you identified, very nicely-- I thought it's a wonderful somebody. You have a of rich experience, both in terms of practice, now you're in Australia, reflecting on what you have done from that rich background. And you identified sort of five pathways--

KAKA: Not me.

KASISOMAYAJULA "VISH" VISWANATH: The system has identified. So meditation infusing in the curriculum GNH, as well as extramural activities, and a whole group of things. And then he also added media literacy. So here is my question-- this is the dilemma, right? We know from the literature, media literacy actually doesn't work.

And I'm a communications scientist, so I can say that with some confidence. So how do we make sure that what we are adopting and scaling across entire-- meditation, of course, we have very good evidence now. Evidence has been building up. So how do we ensure that before we do these things and infuse the entire system, that the things we are trying to do to promote something is evidence-based.

KAKA: I think I have no answer to your question. But what I know one thing is when this idea was actually instituted in the education system in Bhutan, policy makers realized that if the school children are not media literate, they can really be bombarded with a lot of advertisements, the news, that might not necessarily be very helpful to them. The basic idea of media literacy, I do not know. I'm not a media literate person too.

What I know of for sure is if there is a basic media literacy to meet our students critical in consuming the media that comes to them, to be able to at least question to themselves, OK, this is what I have in front of me. This is a piece of information. Where does this information come from? Is it reliable? Do I believe this informative or not? Who do I ask to really ensure that this piece of information is really good to me on not?

Is the product of the advertisement saying that if you do this you don't have to go to a doctor? You would be able to be slim in 20 days? Do I believe in this? So basically the media literacy, in our context, was actually trying to give our children kind of critical thinking skills to be able to put themselves a question, and be able to make a judgment to them, OK, this is really information that is going to be useful to me, that's not going to be useful to me, so I don't believe in this, I believe in this.

So that was the basic idea of media literacy. I do not know what media literacy that you are actually trying to ask me on. Please do not ask me further question, I will not answer.

[LAUGHTER]

KASISOMAYAJULA "VISH" VISWANATH: That ought to shut me up.

[LAUGHTER]

Except that's exactly what we mean by media literacy [INAUDIBLE]. And I wanted to illustrate the point that what we think intuitively nobody can argue with Mr. Kaka. That's exactly what we want our kids to know-- how do you become a critical consumer of media. But the fact of the matter is a number of curricula and even field experiments in our cities ran show very mixed evidence on the effects of media literacy. So this is a continuous challenge. How do we do-- we scale them up and adopt something that is evidence-based.

One interesting thing-- I want to end here-- is social media being trashed or social media are being trashed. I don't know whether it's a plural or a singular idea. English is not my native language. But the interesting thing is the evidence is again-- [INAUDIBLE] we are going to publish a paper pretty soon here which shows that social media can actually be beneficial for positive mental health under certain conditions-- under certain conditions.

And so this is the kind of thing, when we challenge with this, when we scale things up, what kind of evidence base do we have to scale it up before we make decisions, legal or otherwise, number one. The second question we always struggled with, how much evidence is enough before you can act? This is, again, a big challenge.

So Kinga, how are we doing? I know it's 4 o'clock. I don't think we--

KINGA TSHERING: Yeah.

KASISOMAYAJULA "VISH" VISWANATH: Yeah, I've been given a signal. So, sorry, we are out of time. I apologize. But you can find them here. I'll give you their home addresses and everything if you want. So let's thank the panel. They were wonderful.

[APPLAUSE]