

**[Vidya Mahambare]** (1:33 - 2:42)

Welcome to What Shapes Us, a production of the Great Lakes Institute of Management. I'm your host, Vidya Mahambare. On this podcast, we discuss what really truly shapes our lives.

Is it nature? Is it nurture? Is it sheer luck or hard work?

All of us know no single factor can determine how our lives shape out. It is complex. It is the interlinkages of all this, the interplay of all these factors, that decides where we end up.

In this series, along with our guest, we discuss and try to unravel this complexity using the framework of the five E's. These E's are endowment, environment, education, effort and equality of opportunity. My guest today is Professor Prof. Rishiksha T. Krishnan.

Hello. Thank you very much for accepting our invitation. Professor Krishnan is Professor of Strategy and Innovation at the Indian Institute of Management, Bangalore.

He is the acclaimed author of two books on innovation: Jugaad to Systematic Innovation and Eight Steps to Innovation from Jugaad to Excellence, if I recall correctly.

**[Prof. Rishiksha T. Krishnan]** (2:42 - 2:43)

Absolutely correct.

**[Vidya Mahambare]** (2:44 - 4:38)

Jugaad, by the way, is a word for an unconventional sort of problem solving, very localised problems with limited resources. Professor Krishnan is master's from IIT Kanpur. Then he went on to complete an MS in Management Science and Engineering at Stanford University.

He did his doctoral work at IIM Ahmedabad. His career has spanned industry, academia, teaching, research, and institution building. So, he has been a director at IIM Indore, followed by a founder-director or mentor-director at IIM Sambalpur.

And he recently completed, you know, a term as a director at IIM Bangalore, where we are currently filming this show. So, thank you very much, Professor Krishnan, and thank you for the invitation to be on campus. So, as we said, the framework is about 5E.

So, within that framework, we will discuss all the factors that may have shaped your life and career. So, if we start at the very beginning, the endowment. So, endowment is something that we are born with.

It is, it is a hand that, you know, we are, it is something that is handed down to us. It may be genetic abilities. It may be inherited traits or it may be the family we are born into, even the country for that matter.

So, if you look at, look back at your, you know, career and how things shaped us, what do you think endowment matters? And there isn't much in the public domain about your early life, as far as I could see. I know you were born in Chennai and did your schooling there, perhaps I may be wrong. Did you do your schooling there? If you could take us through your early life and what, how the endowment was and if you think that played any role, how your life shaped us.

**[Prof. Rishiksha T. Krishnan]** (4:38 - 5:10)

Yeah. So, first, thank you for inviting me to be part of this discussion. So, actually, your first premise is not correct.

I was not born in Chennai, that's okay. So, I was actually born in the United States. My father was working in the US at the time, and my first 7 years were there.

We returned to India at that time, and after that, I did my schooling in Chennai, largely at DAV Senior Secondary School in Gopalapuram. Following that, I went to IIT Kanpur, and you know the rest of the story.

**[Vidya Mahambare]** (5:10 - 5:10)

Yes.

**[Prof. Rishiksha T. Krishnan]** (5:10 - 5:57)

So, my childhood experience was largely divided between my stint in the US and my stint in India. I think endowment undoubtedly matters. If I look back on my life, I think I did benefit from some inherited qualities from both my parents, and they have certainly made a difference to me.

Beyond that, I think if I look at India as a country, I think many kids are born with a lot of talent, but what happens to them later varies quite a lot and that's where your other factors will come in. So, maybe we'll keep that on hold for the moment. But yeah, I think endowment certainly matters.

That's my take here.

**[Vidya Mahambare]** (5:57 - 6:48)

Yeah, in economics there is a large literature on this, including papers in very top journals like the Journal of Political Economy, where they show how genetic traits and wealth inequality over time relate to each other, controlling for other factors, and how it matters. When people become successful, and if the same question is asked, which is the part of the endowment you think people underplay a lot or do not recognise enough? For example, where you born with sheer stamina or curiosity or a good temperament, is that something that you are born with or at the role of the leadership, do we forget something that we were born with and underplay that factor?

**[Prof. Rishiksha T. Krishnan]** (6:49 - 7:14)

It's difficult to tell, but I am told, of course, I don't remember my very early childhood too well, but I have been told that I was quite a nice kid, is what I was told, which I guess means I wasn't too naughty and I wasn't too destructive and so on. So I think that certainly should have made a difference over time. What are the other aspects of endowment you were talking about?

**[Vidya Mahambare]** (7:14 - 7:25)

So it can be perhaps stamina, it can be raw talent, it can be aptitude for certain things, it can be a curious nature, I am not sure.

**[Prof. Rishiksha T. Krishnan]** (7:25 - 7:44)

I don't recall having any outstanding qualities on any of these attributes that you mentioned. I was generally a cheerful kid, I was moderately curious, but I don't think any of these things particularly stood out when I was a child; that's my recollection.

**[Vidya Mahambare]** (7:44 - 7:48)

Okay. And a lot of your work is in the area of innovation.

**[Prof. Rishiksha T. Krishnan]** (7:48 - 7:48)

Right.

**[Vidya Mahambare]** (7:49 - 8:33)

Yeah, of course. And so you meet, and you have studied lots of startups and entrepreneurs and young kids and all that, in innovation or in entrepreneurship, of course, we'll talk about the effort and hard work that is required, and you have written about systematic innovation and things, but I guess the start is somewhere you have to observe, right? Like, there is some problem that you have to observe and be curious about it.

So currently I am struggling with this thing, which is curiosity can really be developed in people or it is something that you just have or you don't have or ambition for that matter, because ambition is very critical.

**[Prof. Rishiksha T. Krishnan]** (8:33 - 10:18)

I think the crux of the matter is that most of us are born with some basic characteristics. I think what the literature says, even about creativity, is that many people actually have creativity, but the way they express their creativity can be quite different. Maybe somebody will express creativity on the playground, someone while playing music, someone else in the kitchen, someone else in the garden, etc.

So one of the challenges that I understand is that one needs to align a person's type of skills or whatever they have that is distinctive about them with the kind of job or the kind of career path they pursue, because if you do that, there is more likelihood that the creativity will get manifested in that particular domain. So finding that alignment, I think, is quite useful. And we also know from the study of creativity that creativity can be, in a way, stoked or it can be nurtured by a whole lot of other things.

Like, there are methods like design thinking or there is, you know, you could use tricks or I mean, there are multiple techniques which can help you in a way, tap into your innate creativity. So I think many of these things are, as you said right at the outset, they are a little complex, but I believe particularly in India that many of us do have a lot of creative talent and just anticipating some of the other factors you spoke about, the environment and some other things really matter quite a bit.

**[Vidya Mahambare]** (10:18 - 11:11)

Yeah. So then let us come to the environment, since you mentioned, because endowment is going to interact with the environment, and it can be to begin with, a very early environment, say, you know, you have a stable family or not, you even get nutritious food or not. I think studies also show that, you know, what is talked around a toddler in the first two or three years of their life, you know, vocabulary they hear, of course, we can't remember that now, but in hindsight, we know now whether that would have happened or not.

Even those things matter. So in that sense, where did you, you know, which is the environment, we will come to the innovation bit again, but which is the environment that you drew most of your inspiration now, if you think back, like it's the school environment, peers, or did you have access to mentors or at home, parents, how conducive the environment and what role it played?

**[Prof. Rishiksha T. Krishnan]** (11:12 - 12:09)

Yeah, so if I look back, for example, even today, I'm quite confident, standing on a stage and speaking, and if I think about it, I think I started that very young, because I was born in the US, there was a lot of emphasis there on communication, there was, I think I had opportunities to do things on stage, even when I was five or six or something. And that sort of endured over time. So I think that way the environment in which you are certainly makes a difference, because you get certain opportunities and certain opportunities to build certain abilities and hone them over time.

So I think the early experiences do matter. Some things can happen even later. I mean, for example, you know, we often see a phenomenon in India where we find that a lot of the people who are successful in startups are coming from some of India's traditional commercial communities, right?

**[Vidya Mahambare]** (12:10 - 12:10)

Yes.

**[Prof. Rishiksha T. Krishnan]** (12:10 - 12:37)

Now, I certainly believe that the fact that right from their childhood, they would have been listening to conversations around the dining table, around business, around, you know, commerce, around, you know, business models, how to make money. I'm sure all of that gets very immersed into them so that even when they become older, and have opportunities, they are able to pursue them. So I would imagine that all those things certainly make a difference.

**[Vidya Mahambare]** (12:38 - 13:44)

Yeah. So we have this paper in, you know, American Econ Review, very famous paper, Raj Chetty and others who, you know, who show that if the kids are moved from one particular neighbourhood to a different kind of neighbourhood, how when they, you know, grow up, you know, it shows up in their education and even, you know, savings at the retirement age. Of course, there's also a lot of criticism of that paper, as it doesn't control for all the other factors very well.

But, you know, you have been in academics, have a, you know, long stint at, you know, different institutions. You have been in the industry as well. In academics, you have been in teaching and research as well as in a leadership role.

Sure. Which of these environments are really the most harsh in terms of punishing, punishing in the sense if we take wrong decisions, something goes wrong, which of these environments are more, you know, accommodative and which are, you know, maybe and does that make us more cautious leader or because in India we talk a lot about risk averseness and, you know, how we need to increase risk taking.

**[Prof. Rishiksha T. Krishnan]** (13:44 - 14:53)

By and large, academia, I think, is fairly forgiving because academia, first of all, doesn't change that fast. If you make a mistake in academia, even in leadership, the implications of that may show up much later. They don't show up in the short run.

It's not like a company where it might show up in your quarterly results. So, I think academia in general is not very, you know, that way punitive in terms of decision making and so on. It's a relatively good environment to be in.

Of course, within academia itself, obviously, you know, teaching, you do get fairly quick feedback. I mean, if you're not doing a good job, you can in a way, see it on the faces of your students very quickly. Research may take a little longer for that feedback to come.

Of course, you might get some harsh criticism from the journal editors or the reviewers that, of course may happen. But I think leadership is relatively slow in, you know, the feedback you get is relatively slow, is my suspicion.

**[Vidya Mahambare]** (14:55 - 15:35)

And so staying, since you said, you know, academics is the feedback, especially leadership is slow. And you mentioned the research, and it takes time in the research to get feedback and, you know, things like that. But if you think about the research environment of an academic institution, how much do you think there is a persistence in it or path dependence or how much really, a particular leader can influence the research environment?

Because we know the growing importance, of course, of research and India must move to knowledge creation again, as we were doing in the past. How much can that really be changed, research environment?

**[Prof. Rishiksha T. Krishnan]** (15:35 - 16:16)

Good question. So I think I'll take you through IIM Bangalore's experience in this regard in brief. So IIM Bangalore, of course, as a leading institution of management, always had several faculty members who were active in research.

But some of that research was somewhat contextual. Sometimes it was linked to external projects. And there came a time in the early 2000s when IIM Bangalore was interacting quite a bit with international institutions.

And we realised that our research and publications might not be quite on par with the institutions we were trying to partner with.

**[Vidya Mahambare]** (16:16 - 16:16)

OK.

**[Prof. Rishiksha T. Krishnan]** (16:16 - 17:04)

In fact, we had some experience where, you know, a faculty member would meet a colleague, say, from a foreign institution, and they would almost immediately ask, "What is the research you're working on? What are your current publications and so on? And we realised that maybe that wasn't the first topic that came to mind when we talked to them.

So there was, therefore, a concerted effort to enhance research productivity. And we realised, of course, that several things needed to be done for this to happen. So starting from having regular seminars, making some changes to the faculty recruitment process, and then also making changes to the faculty assessment and promotion process.

All of these have happened over the last, I would say, 20 years or so.

**[Vidya Mahambare]** (17:04 - 17:05)

OK.

**[Prof. Rishiksha T. Krishnan]** (17:05 - 18:07)

This started roughly around 2005. So, yeah, it's about a 20-year period. And what we noticed is that these things did make a difference, maybe not very fast, but slowly over time, they have made a difference.

So if you look at our research output today, particularly in terms of top journal publications, both in terms of quality and quantity, it has improved over that time. The conversation between people has also changed. I mean, a lot more of the conversation is related to research and related kinds of topics.

So I think the environment can change, but you have to be fairly focused on making that change. And it's something which, again, related to my earlier comment, it's not something that happens overnight. So you will have to persist with it over time.

There have been many different things that have happened at different points of time and cumulatively, there has been an impact on the research output.

**[Vidya Mahambare]** (18:08 - 18:13)

OK, so it can be a change, but it does need some time to overcome.

**[Prof. Rishiksha T. Krishnan]** (18:14 - 18:46)

Yeah, it also needs some consistency. Yeah, because luckily, ever since about the time I mentioned to 2005, there has been a belief, both with the leadership and among the faculty, that research is something we need to commit strongly to. And I think everyone has worked together towards doing that.

The faculty, PhD students, the leadership of the institute, and everyone have worked together and in a concerted way to make that happen.

**[Vidya Mahambare]** (18:46 - 18:51)

So, it's really important to have all stakeholders on board with a single objective.

**[Prof. Rishiksha T. Krishnan]** (18:51 - 19:06)

Yes, even the board, I would say, because the board has also been supportive in terms of allocating more resources to research. Yeah, so you're absolutely right. It's something that has to be believed in, accepted, and diffused among the most critical stakeholders.

**[Vidya Mahambare]** (19:07 - 19:27)

Right. So, a slightly different question now, but something increasingly used in research as well as, of course, in general R&D and innovation is AI and technology. Right.

And you have written in the past and in your books that how Jugaad is not scalable.

**[Prof. Rishiksha T. Krishnan]** (19:27 - 19:27)

Sure.

**[Vidya Mahambare]** (19:28 - 19:54)

And maybe, you know, things such as AI will make it easier, you know, to come up with new ideas and, you know, innovations and so on. Do you believe that AI would really democratise, you know, the access is there, but does it really help people more who already have structural endowment and can make use of, you know, technology better or can it really be an equaliser?

**[Prof. Rishiksha T. Krishnan]** (19:56 - 19:59)

Yeah, so AI is not a single monolith.

**[Vidya Mahambare]** (20:00 - 20:00)

Yes.

**[Prof. Rishiksha T. Krishnan]** (20:00 - 20:21)

So clearly, some parts of AI can help in the research process in a more obvious way. You take some forms of generative AI, for example, in terms of ideation, in terms of looking at various alternate path solutions, and all of this can play a clear role.

**[Vidya Mahambare]** (20:21 - 20:21)

Right.

**[Prof. Rishiksha T. Krishnan]** (20:21 - 21:11)

But just remember for various other things, for example, you do need lots of data if you want to use AI as a method. And therefore, what is your cumulative endowment of data will play a role. Just to give you a simple example, one of the things we've been trying to do in IIMB is to use data from our incubator for research on startups.

But it takes a long time to be able to develop adequate data to make that kind of thing happen. I mean, it takes several years and you have to make sure there is a consistent collection of data and all the rest. So while it does appear, at one level, that AI may democratise things, it doesn't remove the need to collect data, store it, clean it, and all the rest.

So I think it's a bit of a mixed bag.

**[Vidya Mahambare]** (21:12 - 22:14)

Okay. So the third factor, so we talked about endowment and environment and of course, then comes the education. Education in the majority of the kids in India still perhaps do not have access to good quality school education or for that matter, even very early education, kindergarten and so on.

So there is a back foot there. But even when you come to higher education, and this debate is age-old, whether people take higher education for signalling or skill building. But

nonetheless, you yourself have studied in world-class institutions, whether in India or in abroad.

Do you believe elite institutions certify people who already have good endowments or ability or are they really able to find out and increase the chances of the people who have not been born with a good birth lottery?

**[Prof. Rishiksha T. Krishnan]** (22:15 - 24:14)

It's a good question. So I think elite institutions, almost by definition, they attract people with certain endowments. Because if you're going to cross all those hoops and actually get into an elite institution, it's very unlikely you would manage that without a certain degree of endowment.

I think that is fairly clear. But what I have seen in practise, and again, I think you need to take a time frame, which is somewhat longer. So I just gave you a simple example.

So I studied in IIT Kanpur. In those days, almost all the top rankers in JEE used to come to IIT Kanpur. So we had very brilliant people among our cohort.

And I thought I was fairly good. But when I went there, I realised there were literally dozens of people who were much sharper, much more clever than I was. Now you fast forward, you come to now, it's, I graduated in the mid-80s.

It's been about 40 years since I graduated. So what I've noticed, and I started looking at this from about the 25-year mark onwards when we had our Silver Jubilee reunion. And I just tried to map out what different people in our cohort did over their careers.

Okay, it's informal. I didn't do it very rigorously. But it's interesting to note that the people who are sort of in quotes, the most successful, were not necessarily the people who did the best in IIT.

And some of the people we thought were really at the genius level, they in a way, sort of, I mean, I don't want to be nasty to them. There are many of them who are good friends of mine, but they in a sense, flatter to deceive. I mean, their further trajectory was not quite consistent with the kind of genius they had displayed at the institute level.

**[Vidya Mahambare]** (24:14 - 24:15)

Early promise.

**[Prof. Rishiksha T. Krishnan]** (24:15 - 25:06)

Early promise. So it just suggests that, you know, education does play a role. But what you do after education also matters a lot.

And, you know, of course, we also know we have several examples of outstanding entrepreneurs who dropped out and all that. I mean, even if you ignore them for the moment. So I think certainly some of the other things you mentioned and in a way, I'm sort of moving ahead there, but things like effort and then what kind of trajectory you choose to follow, all of those and of course, the environment in those trajectories, all of those have a role to play.

And of course, finally, there's also some element of chance, luck, serendipity, whatever you want to call it, which often plays a role as well. So I think it's finally a combination of all these things.

**[Vidya Mahambare]** (25:07 - 25:19)

Yeah, but it's nice to hear about late bloomers, you know, those who don't necessarily do well in school, but they can really, you know, do better later on with the effort and so on.

**[Prof. Rishiksha T. Krishnan]** (25:19 - 25:27)

And even if I go back to my school days, some of the people who took most unorthodox decisions they've actually had fascinating careers.

**[Vidya Mahambare]** (25:28 - 25:28)

Right.

**[Prof. Rishiksha T. Krishnan]** (25:28 - 26:07)

Just to give you an example of somebody who's not in my school, but he's a good friend of mine is Rajiv Menon. He's a cinematographer and filmmaker based in Chennai. So when he was my contemporary, he did 12th from the Kendriya Vidyalaya in IIT Madras.

I did 12th from DAV, but we were good friends. And I remember after 12th, he decided to go to the Chennai Film Institute. We were all shocked.

You know, we at that time, we didn't think anybody would go to a film institute, but he went. He did extremely well. He's, you know, world-renowned now in his field.

So sometimes very unorthodox decisions can also take you, you know, in very interesting directions.

**[Vidya Mahambare]** (26:08 - 26:19)

Yeah, I guess the ability to take a risk, perhaps, because, you know, most of the time we stay in the conventional, you know, fields and we are not very much, but maybe he was a sort of a person to take risk.

**[Prof. Rishiksha T. Krishnan]** (26:19 - 26:48)

But if I can just go backwards for a moment, you know, I think, I mean, there are some subtle elements of environment which also matter. You know, for example, I remember that even in my teens, my parents had quite an eclectic set of friends and acquaintances. And often I would, I was the only kid.

So I would often tag along with them when they were going to meet those people.

**[Vidya Mahambare]** (26:48 - 26:48)

Okay.

**[Prof. Rishiksha T. Krishnan]** (26:48 - 28:35)

And even as a youngster, I was, you know, I would be privy to all sorts of discussions on a variety of subjects, not just, you know, the subject I was studying. And I think that certainly helped a lot in terms of getting a kind of breadth of perspective that helped me a lot going

forward. Again, you know, my father, though he was originally a radio astronomer, later on, he started his own company.

So I also worked with him for a few years. And so I also got some exposure to what it takes to run a company. I, in fact, for some time was even running his company when I was in my 20s.

So all of this gave me a kind of unique experience that I have used even in my recent tenures as director. Just to give you a simple example, you know, those days I got exposed to all these indirect tax laws, you know, like excise and, you know, customs and all that stuff. And though, of course, the laws have changed, some of those basics are there in my head even now.

So, for example, even in INB, if there is a GST issue, I can still relate it to some of the things I learned when working with my father regarding the taxation of his products. So some of those things are very unique. So you talked about path dependence.

I think this path dependence certainly has a role to play. And that's where I think, unfortunately, somebody who has not had the same kind of opportunities might certainly have a disadvantage compared to, of course, everybody has their unique circumstances. They might get another set of skills from their experience, but they certainly would not have had the same set of experiences that say I had.

**[Vidya Mahambare]** (28:35 - 28:40)

Right. So maybe we can call, I'm just thinking aloud, we can call the environment as, you know, informal education.

**[Prof. Rishiksha T. Krishnan]** (28:41 - 28:41)

Yeah.

**[Vidya Mahambare]** (28:41 - 29:12)

And, you know, we have formal education, but the environment that you grow up and all the experiences that you have, you know, you just tag along with your parents for so many conversations and, you know, that just ingrain in your mind different things. So that informal education is also equally or perhaps sometimes more important, especially if the quality of formal education is not that, you know, great, I suppose. So all this is there, we talk about endowment, environment, education, but of course, as you mentioned earlier, effort matters.

**[Prof. Rishiksha T. Krishnan]** (29:12 - 29:13)

Sure.

**[Vidya Mahambare]** (29:13 - 29:34)

Right. So and you have worked across different areas. So some of those decisions were deliberate decisions, deliberate effort to move, change your path or it just happened that, you know, the opportunity came by and you took it or how much of an effort was there to develop your...

**[Prof. Rishiksha T. Krishnan]** (29:34 - 31:07)

I think it's a combination of both. You see, when I joined IIM Bangalore as a faculty member in 1996, very soon after joining and I was fairly young at that time, in my early 30s, very soon after I joined, the institute requested me to be the placement chair. This was three years after I joined.

So in 96 I joined, in 99 I was the placement chair. In 2002, I became the PGP chair, which is supposed to be one of the most critical jobs on campus because PGP is our flagship programme. So I remember even at that time, some senior faculty members were somewhat surprised.

I mean, maybe even some of them were shocked that the director had actually asked me to be the PGP chair at that point of time. So I mean, I got exposure to some aspects of managing the institute at a very early stage of my career. I'm sure it had some negative impact on my research and publication and so on.

In fact, our norms today are much tighter than they were at that time. So maybe in today's norms, maybe I would not have been able to do all that. But at that time it was okay.

And all of that really helped me, you know, understand the institute, understand the culture, understand what leadership means and so on at a fairly early age. So I think these have all been advantages. And of course, I must also tell you that a lot of this started much earlier.

Even in IIT, I was one of the Gymkhana executives and I did a whole lot of other stuff, which I think helped towards...

**[Vidya Mahambare]** (31:07 - 31:19)

I understand it is the opportunities that you got or the things were asked, you know, you were asked to do certain things. But it seems you're underplaying your own effort.

**[Prof. Rishiksha T. Krishnan]** (31:21 - 31:32)

No, no. Well, effort works in different ways, Vidya. See, if you look at effort, so any job to do it well, it needs a lot of effort, for sure.

**[Vidya Mahambare]** (31:32 - 31:33)

Exactly, yeah.

**[Prof. Rishiksha T. Krishnan]** (31:33 - 33:16)

So, you know, I've been... I recently had a chat with our alumni association and so we had a similar discussion on one or two things. So one of the things I was telling them is, you know, that way I would be considered quite, you know, boring in a way.

I don't have a TV at home. I don't watch any OTT platform.

I had subscriptions, but all of them have lapsed. I don't watch them. I do other things, of course.

I do travel. I do occasionally go and see a movie and so on. But a lot of my time and effort is actually focused on my work.

Directed. Yeah, directed. And I think that matters.

I mean, if you want to really excel, and the world is... I'm not only talking about competition in the I'll do better than you sense, but if you really want to, you know, do something impactful, I think you have to spend quite a bit of time and effort on it. So effort for sure matters.

I wouldn't doubt it for a moment. Now the question of... you also asked a question about choices.

Yeah, I think one does make choices. I mean, I do remember that somewhere around 2012 or so, so that is about 16 years after I joined IMB as a faculty member, I did think, you know, maybe this is a good time for me to think of taking on some leadership role. And in fact, 2012 was the first time I actually applied for a position.

But interestingly enough, in 2012, when I applied, I didn't even get called for the interview. Okay, so...

**[Vidya Mahambare]** (33:16 - 33:17)

That was here?

**[Prof. Rishiksha T. Krishnan]** (33:17 - 33:20)

Both in IMB and IIM Ahmedabad also, both places I applied.

**[Vidya Mahambare]** (33:20 - 33:21)

Okay.

**[Prof. Rishiksha T. Krishnan]** (33:21 - 35:04)

Neither of them I got even called for the interview. In fact, I knew one of the selection panel members in Ahmedabad. So, I asked that person later, fine, you didn't select me, it's okay, but don't you think you should have at least called me for an interview?

So, the reply I got is, no, we were looking for somebody with international exposure and experience and we wouldn't have that in your kitty, so we didn't call you. I said, okay. But the fun part of it is exactly the immediate next year.

In 2013, I applied for the director of IIM Indore on the suggestion of one of the other IIM directors. In fact, he had also sent in my nomination. Not only was I shortlisted, I was also chosen.

So, this is always a bit of a mystery to me, how in just one year's time, I suddenly became, you know, anyway, those are all the mysteries of life. So, we will set it aside. But the answer to your question is yes.

I think there are times when I have thought that maybe this is the time I want to do something different. I also, by the way, worked with a startup in the year 2001 by one of our students. So, I spent a good part of one year.

This was the tail end of the dot-com boom. So, I've actually done multiple diversions from the normal academic path. One is the startup.

I also spent one year on a research project in ISB. That was in 2011. Then, of course, I took leave from IIM Bangalore to be the director of IIM Indore.

So, I was away for five years and then I came back. So, yeah, over the last close to 30 years at IIMB, I've also gone in various directions.

**[Vidya Mahambare]** (35:05 - 35:08)

So, then, you know, one question, effort is important.

**[Prof. Rishiksha T. Krishnan]** (35:08 - 35:08)

Yeah.

**[Vidya Mahambare]** (35:09 - 35:59)

It's definitely no two ways about it. But sometimes, you know, people say about grit and effort. But where, how do we know that something that now the time has come, we need to give up?

Like if more effort is not going to lead to any outcome and we need to understand the right time. Suppose if you think about the research paper, right, and we spend time and but you can see the dead end, but you have invested like so much time. There is some sunk cost and it's very difficult to overcome that sunk cost.

So, what is the way to say figure out? Did it happen to you anytime that you put in effort in something, you know, a lot of effort and it was not going anywhere? And then finally, you decided I have to, you know, shift the gears and give it up and, you know, do something else.

When does it reach a dead end?

**[Prof. Rishiksha T. Krishnan]** (36:01 - 38:18)

So, I have tended not to look at things quite that way. And I have found that most of my experiences in diverse directions have in some way or the other, come back to help me later. So, I don't tend to look at things in those very black and white ways.

Some things have taken a long time. For example, I wrote my first book in the year, it came out in 2010. But the idea of the book went back to 2003.

So, in 2003, I had gone to attend an international conference in Brazil, where I had presented a paper on India's innovation system. It was fairly well received. And that's the time I realised that there has been no systematic treatment of that in any kind of detailed manner.

So, I was quite keen to write a book on that. And there was also another inspiration for that. There was an earlier edited collection on national innovation systems, which was edited by Richard Nelson.

And that book, which came out, I think, a bit earlier, 1995 or something, that book didn't have a chapter on India. So, that time I was doing my PhD. And I remember I was quite bugged about why India wasn't included in this book.

So, right at that time in 1995, I had sort of decided for myself, one day I'm going to write that chapter. And that chapter in a way, became what I presented in Rio in 2003. And then I felt I should write a book-length statement of that.

But it didn't happen either very easily or very fast. It actually took quite some time. And it's only in 2008, I was lucky I got a fellowship to the US for a couple of months at the University of Pennsylvania.

That gave me a kind of two months really clear time to think about the book and how I would structure it and so on. And that proved to be very useful because after I came back to India, I was able to write the book very quickly. And in a space of maybe a year and a half, I was able to get it out.

So, I think things like that do take a long time. I mean, I don't give up that easily, I guess. So, I have tried to pursue and maybe I'm also a little fussy even when I choose things.

So, I...

**[Vidya Mahambare]** (38:18 - 38:24)

Maybe that answer is there. Maybe choose wisely to begin with where you have full passion and so then there is...

**[Prof. Rishiksha T. Krishnan]** (38:24 - 38:33)

So, I don't think I'm very good at doing things half-heartedly. So, I'm fairly careful at the choice stage. So, and then once I've chosen, I try to stick to it.

**[Vidya Mahambare]** (38:34 - 39:27)

Okay. So, in your own career, you already spoke about the opportunity. So, even if effort is done, we need to have opportunities that come our way.

So, the fifth C in this framework is equality of opportunities, right? What can we do in general to provide equality? I mean, of course, the state has done many things and there are a lot of policies that India has, but truly speaking, we still don't have equality either gender-wise or social structure-wise.

What really needs to change to create slightly better opportunities for everyone or even in the innovation space, say, for example, funding, right? I'm sure there are startups from backgrounds where they cannot find funding. Maybe they simply don't know how to pitch for funds or...

So, what should be done really?

**[Prof. Rishiksha T. Krishnan]** (39:29 - 42:46)

I think I'll just go back to the earlier one you mentioned. I'll go back to equality of opportunity from the education point of view. So, I think there's a lot we can do.

I'll just give you one example. So, I work with an organisation called Foundation for Excellence. It is an NGO which was started in the US in 1994.

It has a very simple objective. It essentially tries to identify very talented students in India who were facing economic and financial constraints that may not allow them to pursue their college education. So, these people are academically bright.

They have already shown that, but they have financial hardships or constraints which might prevent them from going to the college which they want to go to. So, this organisation was started by a gentleman called Prabhu Goyal, who is a serial entrepreneur. He's a super senior of mine in IIT Kanpur.

And he started this organisation when he exited his first startup successfully. So, what we do in FFE is we essentially try to remove one constraint to equality of opportunity, which is financial constraints. And we try to help students who are very smart pursue their college education in three areas, in engineering, in law and in medicine.

Last year, in 2024-25, we gave about 18,000 scholarships across India in 25 states. And our typical scholarship is about 50,000 rupees per month. In addition, we provide mentoring support.

We provide soft skills, internships and access to online courses. So, this is as a programme. This programme has been very successful in helping students from all over the country.

We are present in 25 states, overcoming that barrier to get into the college of their choice. And we have been able to help students do extremely well after that. And more than 90% of the students who go through our programme are able to get well-employed.

And then they are not only able to take care of themselves, they are able to take care of their families as well. And typically, we have an income limit of 3 lakhs per, I mean, the family income should not exceed 3 lakhs. So, I think more and more efforts like this.

And luckily, many of the leading industrial houses in India have been providing good scholarships. People like Azim Premji and Shiv Nadar have even set up universities. So, I think there's a lot that people are doing and can continue to do to make opportunities more easily accessible.

But I think the core of the matter is really in the schooling stage. I think, you know, whatever you say, because if people don't get a good schooling, if kids don't get a good schooling, then in a way, their path to all many future opportunities is constrained. So, I think if you really want to make equality of opportunity a reality in India, you have to address access to schooling.

So, we have, of course, the Right to Education Act, you have so many legislations, policies, all the rest. But you and I know it's still a fact that that's an opportunity which is not equally available to everybody.

**[Vidya Mahambare]** (42:47 - 43:13)

Yeah. And after so many years also, we have a severe shortage, for example, of teachers. And then there have been suggestions that the technology could replace teachers.

But I don't know your view. But I think, I feel at that young age, it's very difficult because you need some human there, a person there, as an interface between the technology to keep them motivated. Otherwise, technology can always be used.

**[Prof. Rishiksha T. Krishnan]** (43:13 - 43:17)

So, I think that's fairly well accepted now. But what do we do?

**[Vidya Mahambare]** (43:17 - 43:21)

Somehow, we are not able to have, like millions of teachers, we are short-staffed.

**[Prof. Rishiksha T. Krishnan]** (43:22 - 44:28)

So, I think you're absolutely right. If you want student engagement, you do need some human intervention. And there are a lot of things which people are doing.

I think, for example, there are many NGOs, which are trying to promote this kind of thing. I recently attended an event of an NGO called E-Vidyaloka. They are providing online classes to supplement what the teacher does in the classroom.

So, I think there's no shortage of good intentions and people trying out things. But I agree with your first point. I think no country has really made significant progress without getting its basic education system sorted out.

And almost all the examples we know, whether it's Finland or anywhere else, they all have invested significantly in teacher education and providing good teachers. And I don't think there's a technology shortcut. Technology can complement, technology can support, but it's not a substitute.

At least as from today, and I don't think it's going to change. Yeah, I don't think so.

**[Vidya Mahambare]** (44:28 - 44:46)

Right. I think, yeah, means, you know, the recent book of Professor Arvind Subramaniam and Devesh Kapoor, and we know this, but they also again document how India, you know, put a very early emphasis on higher education and a lot of resources into higher education, but not in the, you know, primary education.

**[Prof. Rishiksha T. Krishnan]** (44:46 - 44:52)

That is not true anymore. I mean, we have data right now. We know that almost every kid is going to school.

**[Vidya Mahambare]** (44:52 - 44:56)

Going to school. Enrolment rates are high, but as you said, the quality...

**[Prof. Rishiksha T. Krishnan]** (44:56 - 45:33)

Yeah, your Sarvashiksha Abhiyan and all have been fairly successful in getting kids to school. And your midday meals and many other things are, they're working at some level. So the problem is fairly visible now.

Now you have to really address the quality issue in schools. I think the government doesn't want to do good things. There is this whole focus on functional literacy and numeracy.

That's a good programme. At least the early results are quite promising. But once again, it's a question of executing that kind of programme consistently and uniformly across the country.

Some pockets is doing well. Can you make it happen everywhere?

**[Vidya Mahambare]** (45:34 - 45:36)

Right. In your words, can we make it scalable?

**[Prof. Rishiksha T. Krishnan]** (45:36 - 45:37)

It has to be scalable.

**[Vidya Mahambare]** (45:38 - 46:13)

Scalable, yeah. But coming back to the organisations, you know, the organisations who say succeed in creating impact, you know, via innovation or, you know, anyway, do you feel they, and you have studied lots of organisations, do they create, you know, equality of opportunity for their workforce? Or they are just good at spotting talent, you know, natural talent, which can be gone into an endowment?

Or what do these organisations really do? It can be, of course, a mixture of everything. But the crux is where?

Finding the talented people or providing or both is needed.

**[Prof. Rishiksha T. Krishnan]** (46:13 - 48:32)

I think it's partly a mix. It depends a little bit on what kind of innovation is driving your organisation. So, let's take two examples.

Let's take Toyota. So, Toyota has been one of the world's pioneers in Kaizen and basically shop floor innovation, if you like, where they believe in continuous improvement as the way to drive productivity, efficiency, quality, etc. Now, their whole scheme is very flat, very democratic.

The whole idea is that you get suggestions from the people who are on the spot, on the shop floor, and then you use those suggestions to improve the quality and efficiency and so on. And that kind of programme has been very successful. This is one of the core principles of Japanese quality management and whoever has been able to implement that well, has been able to do this quite successfully.

However, if you go to the other end of the spectrum and you're looking for breakthrough innovations or you're looking for radical innovation of some kind, this ground up method may not be the best method. There you will willy nilly be dependent on certain people who are making those leaps or being able to really think out of the box and doing something different. So, that's going to be a different phenomenon.

There you might have to work with mavericks. You might have to work with people who are unconventional. You sometimes have to work even with slightly crazy people because they are the ones who might be able to take those leaps of faith.

So, I think the two are quite different. And we've seen in practise, even a company like Toyota, which has done extremely well in the automobile industry, in a way it has struggled to adopt the more radical kind of innovation. It's done very well on the Toyota production system, on shop floor participation and so on, consistency, reliability.

But very few people would say that Toyota is the world's most innovative car maker or something like that. So, I think getting both, generally getting both in one organisation is quite tough.

**[Vidya Mahambare]** (48:33 - 48:41)

A very nice perspective, depending on what kind of innovation you are looking at, though your requirements may differ.

**[Prof. Rishiksha T. Krishnan]** (48:41 - 49:37)

And we have historically seen that. I mean, I'll just give you another simple example. So, in the Japanese consumer electronics industry, Sony was always seen as the innovator and Panasonic was often seen as the one with a company which was very good at scaling up.

So, if you go back about 25-30 years, you would find that many of the new things is Walkman, several of those very outstanding innovations came from Sony. Sony was very good at the early stage of the life cycle. They would introduce the product, customers would love it, there would be early adoption, all that would happen.

But the later stage of the life cycle, other Japanese companies would be very good at creating somewhat Me Too type products and then producing them very efficiently, bringing in all those other efficiency-related innovation practises. And by that time, Sony would move to the next product. So, I mean, so there are...

**[Vidya Mahambare]** (49:37 - 49:38)

Different focus.

**[Prof. Rishiksha T. Krishnan]** (49:38 - 49:53)

Yeah, most industries have that. There are some players who are very good at the sort of slightly more radical innovation and there are others who are very good at the continuing process and manufacturing innovation, which is required if you want to play across the life cycle.

**[Vidya Mahambare]** (49:53 - 50:15)

Right. Any Indian examples in that? Because traditionally, I suppose Indian companies would be in the second part, right?

We just adapt to whatever innovations have taken place. We adapt and we use technology wise. But increasingly, it has been said that we have to spend on core R&D and, you know, come up.

Is that happening enough in India or you feel we should, you know, continue to focus right now for the second part?

**[Prof. Rishiksha T. Krishnan]** (50:16 - 51:47)

No, I think we are being partly forced to focus on the first part as well. All the geopolitical changes, the need for us to be more self-reliant, the entire focus on Atma Nirbharta and all that, that will require you to do a certain amount of even the slightly more challenging innovation within the country. That we have found out the hard way.

I mean, we have found it out earlier also. In between for some time, we were ignoring that. Now, once again, we are redoubling our efforts because otherwise you are going to be stuck.

We have seen it many times, right? We saw it even during COVID. And increasingly, what's becoming obvious is that you need to have at least some capability across the entire supply chain because otherwise just one component somewhere, you just see all this, what's happening in EVs with some of those magnets or even if you go back to COVID for our indigenously produced vaccines, some of the intermediates were not available.

In fact, our external affairs minister, when he visited the US during COVID, he had to talk to the US government and request them to intervene to make sure that some of the things that went into our vaccines were available. So, I think it's now obvious that if you want to be totally sovereign, if you don't want to be dependent on others and particularly if you're a country like India, which is so big and with such a large population and aspirations like we have, you really need to have capabilities across the board.

**[Vidya Mahambare]** (51:47 - 52:00)

I think I've seen that in mobile production as well: our exports went up, but our imports from China also went up because of all these intermediate inputs and things like that.

**[Prof. Rishiksha T. Krishnan]** (52:00 - 52:18)

Right now, it's probably true, right? Most of the mobile production in India is happening through the assembly of things that are coming from elsewhere. China is perhaps the only country that has the whole ecosystem.

It has the components, it has the finished products, it has everything in the same place. Creating that will take time.

**[Vidya Mahambare]** (52:19 - 52:48)

So, we have talked about all five E's and all five E's played a role somewhere or the other as your life, you know, across your life. If you have to rank order, say, or if it's possible to rank order, how would you rank order these five? And it would be different for every person, of course, but for yourself, how it would be?

So, we are talking about endowment, environment, education, effort and equality of opportunity.

**[Prof. Rishiksha T. Krishnan]** (52:51 - 54:38)

Yeah. So, personally, I can't complain much about the last one because I did not have any significant barrier as far as opportunity is concerned. If I look at the other four, I think their roles are a bit different.

So, endowment in a way provides you the foundation and if you have a good endowment, it makes it easier to build on that. Environment, again, the kind of environment you have at different times matters. I would, for example, imagine that for a young person, the first one or two jobs you do, the kind of environment you have there, the kind of boss you have, the kind of feedback you get, that shapes your working habits, your working style, even your motivation for work and so on.

So, I think at that stage, that would be particularly important. Effort is more; I think it's more a story of, you know, they say in racing that the race shouldn't peak too early. OK, so you have to be able to treat life more like a marathon than like a sprint.

So I think the core thing is how can you be healthy enough, strong enough, have enough stamina to sustain your effort across a longer period of time. I think that's really the core. Some people, it appears in a way, slightly burnout early.

**[Vidya Mahambare]** (54:39 - 54:48)

So, am I reading it right? Is it right to say that suppose if you subtract your education, that would have had the least adverse impact, formal education?

**[Prof. Rishiksha T. Krishnan]** (54:50 - 55:58)

I don't know about that because formal education played an important role for sure. And I think that's something we did not touch upon, which is the whole aspect of network, social capital, those things also matter. And I can see that, particularly today looking back, I can see that those factors make a big difference.

And sometimes they're related. I mean, for example, IIM Ahmedabad where I studied has had a sort of disproportionate influence on the Indian management education system. So the fact that I studied there, I did my PhD, I know all the professors, I'm part of the broader alumni network.

I mean, maybe I can't pinpoint, but I'm sure it's had significant positive advantages and the same would be the case for IIT Kanpur. In fact, I mean, I could argue that maybe what I learned there was far less important than what I learned from my peers and the value of the network after that.

**[Vidya Mahambare]** (55:59 - 56:15)

So wonderful to see how all five things played a role in your life. Just last two counterfactual questions. One, if you were in your 20s now and you could relive your 20s, is there anything that you would have done differently?

**[Prof. Rishiksha T. Krishnan]** (56:20 - 57:32)

No, I think the specifics might vary, but I don't think too much would vary as far as the principles and ideas are concerned. I think one has to, in a way, keep learning, have a variety of experiences, and pursue what one believes in. It's very difficult to be a sustained high performer unless you have an interest in what you're doing.

I think all of the, I wouldn't think it would make too much of a difference. I mean, to be honest, I don't, I have, okay, one thing I should mention, though, that I think one challenge youngsters today face is just distraction. There are far too many things to do.

There's all this FOMO and various other things which are also at play. So I think for them, one of the biggest challenges today is how to use their time and to, yes, get the value of diverse experience, but at the same time, make sure they have certain focus and impact. I think, I don't know what the exact answer to that is, but I think that is going to make the difference between those who do really well and those who don't.

**[Vidya Mahambare]** (57:33 - 57:57)

So that was going to be my last question. So I'll tweak my last question now somewhat, because the last question was going to be what advice you would give for the current young generation. You already answered that, but let me slightly tweak, what advice would you give to a 20-year-old from a non-metro area, like a relatively semi-urban or rural area in India, what they should focus on to begin with in today's environment?

**[Prof. Rishiksha T. Krishnan]** (57:58 - 59:26)

I think, first of all, the barriers or the walls between metro and non-metro are coming down, partly due to technology, partly due to mobility, partly due to migration. I think the walls are coming down. So I don't think that by itself, should be a big barrier.

What I do think makes a difference, see, we have a big challenge in India today, which you know very well. I think you've also alluded to this in some of your writing and so on. We have a very strange situation where there are jobs looking for people, and there are people looking for jobs, and these two don't meet.

So to me, one of the core things which will really help is developing a good work ethic, being able to take on something and deliver it without too much supervision, being very professional in your dealings and developing deep skills. I think people across the country are actually looking for folks like that. Companies are looking for people they can employ.

So if you can be in a setting which is not a metro, maybe less distractions, maybe you can focus more on building some of these things, you build that strong work ethic for yourself, I think you actually have a lot of opportunities.

**[Vidya Mahambare]** (59:27 - 59:44)

Yeah, I think this is a wonderful note to complete our conversation. Thank you very much Professor Krishnan, for giving your time.

I thoroughly enjoyed it. I hope you had a good time too, and I hope our audience has as well. Thank you very much.

**[Prof. Rishiksha T. Krishnan]** (59:44 - 59:46)

Thank you, Vidya. Thank you for inviting me. Thank you.