

Psychology of Bilingualism and Multilingualism
Professor Ark Verma
Dept. of Cognitive Sciences
IIT Kanpur
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Hello and welcome to the course The Psychology of Bilingualism and Multilingualism. I am Dr. Ark Verma from the Department of Cognitive Sciences at IIT Kanpur. In this week, I am talking to you about miscellaneous topics in bilingualism and multilingualism. We are basically looking at other ways in which bilingualism being a bilingual or multilingual can actually impact our life and other practical considerations that are there.

Now, in the previous lecture, I was talking to you about the aspect of acquiring literacy and acquire learning to writing systems, you know, that are important challenges for a bilingual or a multilingual. That is basically, if you look at that in a broader sense, both of those things have to do with this, you know, broader notion that is more prevalent these days, which is of bilingual education. Now, you would know that more than 50% of the children, you know, in our country or across the world, actually attend schools where they are actually, you know, the medium of instruction is not their native language. They are learning a second language in order to learn concepts about basic science, maths, and other things about the world.

Now, it is interesting. And this is a question that has been variously asked and has been asked, you know, several times in different fora is that, is this the best strategy for imparting education? For example, researchers have consistently asked this question is that whether individuals would learn best and grasp the most basic concepts best in their first language or, you know, in a second language, say, for example, in case of students going to an English medium school across India, whose native language is not English, and they are being taught, you know, basic concepts about science and maths in English medium instruction. So is this something that is to be encouraged? Is this problematic? Does this have impact for people's overall cognitive development, scientific development, their ability to innovate, their ability to learn and appreciate the world? And these questions therefore have been asked, you know, variously by different people at different times and place. Given that we're doing a course in bilingualism and multilingualism, it makes sense for us to sort of visit this idea of bilingual education and try and understand if there is, you know, some merit to bilingual or multilingual education, or is it that, you know, education should strictly be imparted only in the first language. Now, to begin with, a working definition of bilingual education would just be

the use of two or more languages in the classroom through the medium of instruction in schools.

Now, indeed, as I was just saying, it is very common for schools across the world to impart instruction in a dominant societal language, say English, while providing some support or instruction in the native language at the same time. For example, I went to an English medium school where mainly all the subjects were taught in English. However, Hindi was not totally left out. It was a subject wherein we learn to read and write in Hindi, also appreciate some grammatical aspects of it and appreciate the, you know, the literature of Hindi and so on. So basically, as far as I can tell myself and a bunch of us actually go to these schools, which are imparting bilingual education in a certain extent.

Now, before we go in more detail about this, a very important distinction needs to be made between language instruction and language support. Language instruction is more like the medium of instruction in a given school. For example, it refers to a practice where all content area instruction is imparted in that specific language. Say for example, an English medium instruction school imparts all subjects in English medium, a Hindi medium instruction school imparts all, you know, subject knowledge in Hindi language. Similarly, a Tamil or a Bangla or a Marathi medium school would do.

Whereas on the other hand, language support basically refers to the fact that whereas content area education is being imparted in a different language, one of these languages could also be imparted some kind of language support by including it as a language subject. For example, in the curriculum where children are at least, you know, asked to learn to read and write and appreciate that language to a certain extent so that they're not, you know, sacrificing their proficiency in that language while still being more proficient in the dominant language, which is the language of instruction. So for an Indian setting, you could basically contrast, you know, an English medium school where all instruction is in English, but Hindi is a subject versus a Hindi medium school, for example, where all instruction is in Hindi, but English is a subject. So this is basically what bilingual education basically looks like. And you can, follow either of the two models, which is a language instruction model or a language support model.

Now, basic question here to, that has been asked in that I was sort of, you know, putting forward to you was that whether students actually grasp concepts better, they are able to think about abstractions better, innovate better in the language that they understand the best, or it could also be achieved in a second or third language. Now, given that you have done this course and we've read so much about bilingual language acquisition, I'm sure you would remember that as long as a student is actually going to school and learning the two languages at a very early age, let's say two and a half, three years of age, which

is the common age of school admissions, you know, in India, ideally, they would be able to, you know, appreciate both the languages to the best of the abilities possible. The second language also matures along with the brain. It also matures along with the abstract development of abstract thinking and other higher order cognitive skills. So ideally, if a child is getting into a school at two and a half, three years of age, and is being imparted education in two languages or three languages, for that matter, I don't think it should be a major problem because their brain maturation and other cognitive development are happening in both the languages at the same time.

There is, as much as we've seen, there is not really a significant lag in the linguistic and cognitive abilities for these very early bilingual children in either of their two languages. It is very common for people like say, for example, myself, where at home, nobody spoke in English and at school, nobody, you know, was encouraged to speak in Hindi. So the idea is that both the languages are getting their own space and time and are being acquired at the same time, at the same pace to the same level of proficiency and detailing. And therefore, I would say that I probably did not suffer from the lack of knowing English. However, this would become a problem if children are being admitted to schools, let's say at six, seven years of age, or say, for example, there, you know, they are suddenly switching to a different mode of medium of instruction and where on top of learning and grasping the scientific concepts, they have this additional job of picking up the second language as well.

And therefore this would, this is something that is, you know, something that researchers, educationalists, policymakers have really wondered about. And you can see that there are consequent changes in, let's say the national education policy, which have come from time to time, the most recent being the National Education Policy of 2020, which plays a certain emphasis on, you know, imparting these basic concepts in the native language of individuals, while not entirely shunning off the use of the second language, which is English for the most of us. Moving on, an interesting model of schooling that is followed mainly in the Western countries could be considered, which is where students are initially provided with literacy, for example, able to, you know, learn to read and write and some content in their home language, say for example, French in France or Dutch in Netherlands and Belgium, Spanish in Spain, you know, Finnish, maybe in Finland and so on. While they also receive explicit instruction to learn the dominant language, which would be English. So they're starting their language education in their native language, but there is obviously some instruction in the societal dominant language like English as well.

Now this would basically, you know, create a situation where individuals will be able to grasp the critical concepts in the native language, but at the same time, they'll not be

lagging behind in their skills pertaining to the second language, which is, you know, a lingua franca, which is an important language to know and acquire at around the same age. Now in such a program, as a student is progressing through and is attaining higher levels of proficiency in the dominant language, you will see that the ratio of native language versus the second language actually changes. If for example, from early school to middle school to high school to college, the ratio sort of starts getting reversed. Initially it is first language, a lot of first language and little of second language. And gradually what happens is by the time the individual comes to college, it is a lot of second language and some of first language, which is there.

So researchers have actually opined that this kind of model can be a very beneficial model, which basically allows individuals to not sacrifice their proficiency in a dominant societal language while at the same time making the most of learning the most critical concepts about the world, abstract thinking, etc. in the language that they understand the best, which is the native language. Besides these things, researchers have, besides these obvious advantages for cognitive development and academic achievement, researchers have also opined that the purpose of bilingual education is to build tolerance towards other linguistic and cultural groups and at the same time foster appreciation for human diversity. If you look at your society, if you look around yourselves, you will find that individuals are, you know, we are actually living in a very diverse society. We're actually living in a situation where everybody speaks at least two, if not, you know, at least two, if not more, but in a lot of cases, say for example, in the South of our country, people typically know, my friends typically know three to four to five languages because, you know, there are so many people around and you have a chance, if you have a curiosity, you have a chance to interact with them in the different languages they know.

It also allows us to, you know, appreciate different cultures, appreciate different, you know, look more symbolically towards linguistic and cultural differences, build some kind of tolerance towards them and basically build an overall and cohesive community. So again, this is very, very interesting and it's very, very important that, you know, individuals become, in some sense, accepting of the cultural and linguistic differences and the society overall will prosper better if it is a united society, if it is a society where everybody can communicate with each other and understand each other and obviously, you know, be able to accommodate each other's preferences and unique styles. So let's look at some, moving forward, let's look at some common annals of bilingual education. Now bilingual education is not something new, it's not something that has just come up. In fact, the practice of bilingual education, you know, as researchers have documented, probably dates back to as long as four to five thousand years ago, you know, back to the biblical times.

For instance, Baker observes that bilingualism and bilingual education would have actually become desirable whenever people of different language groups would have come in contact. For instance, he speculates that bilingual education would have been very common for ancient Greeks and Romans and those primitive societies where people were still traveling to different parts of the world and come in contact with different language groups. Also, other researchers such as Beardsmore have actually noted that bilingual education existed in Europe, parts of Europe long back and also in the United States of America on, you know, the continent of North America for as early as the 17th century. Now, if you sort of look at it, bilingual education is, you know, inherently tied with political, economical, historical and socio-cultural factors which actually govern whether in a given society at a given point in time, bilingual education is actively promoted, it's frowned upon or is explicitly restricted. See, typically what happens is that it depends upon the composition and nature of society, it depends upon the ideological sway in the society, it depends on, you know, economic factors, it depends upon historical, socio-cultural factors.

For example, if two linguistic groups have a lot of bad blood between them then they would not want their community members to learn the other language which interestingly, you know, fuels these differences, fuels the bad blood, fuels the fights and so on. So, ideally, you know, the ideal scenario is that everybody understands each other and they sort of have a common language or at least they know a little bit of each other's language but again these decisions are tied with so many of these different factors and so many of these different factors actually come together in deciding what kind of an education policy, what kind of a language policy a given region of the world is having at any given point in time. I mean, interestingly, Leibowitz actually remarks that language policy including and not limited to decisions about the medium of instruction in school is rarely about languages themselves but rather it has always been about the groups of people who speak non-dominant languages but enjoy a lot of social sway in the larger society and as a means of social control or dominance they basically use or start peddling, you know, or forcing everybody to learn their language. You may, you know, for understanding this point better you may reminisce or you may basically try to think about the colonial era, the imperialist era where say for example the English, you know, colonized different parts of the world, there were very few, you know, in India as well but because they enjoyed that much social power and political dominance, English medium education sort of became deeply embedded and the English ways of education became very deeply embedded in India's school education system.

Now in our context we could actually also talk about say for example the introduction of the trial language formula in the, you know, education policy of the country which goes as far back as 1968 and maybe even earlier which basically mandated the acquisition of Hindi, English and one regional language across the country so that, you know, it allows

a chance for linguistic groups to preserve their regional language but also learn a lingua franca at that time which is English typically for, you know, large and diverse country like ours.

More importantly it also sort of the learning of Hindi is in that sense optional and it still stays there to a certain extent. Now is bilingual education effective? Let's look at this question in some more detail. Now researchers investigating the effectiveness of bilingual education have actually looked at the comparisons of children's academic performance in monolingual versus bilingual educational programs. For example, you can look at carefully designed experimental studies that would provide in useful insights into the effectiveness of these programs. You would also look at say for example meta-analysis which bring together a larger number of studies to sort of provide some insights into whether these things work or not.

For example, one of the critical meta-analyses was performed by Baker and De kanter who reviewed 28 studies on bilingual education and concluded that there was very weak research evidence in support of bilingual education. However, as I'm saying a bunch of these things could be colored by experimental confounds and so when this, you know, when Willing in 1985 reconducted the same meta-analysis using the same studies as Baker and De kanter albeit with some slightly modified inclusion criteria, they found that the bilingual advantage was very prominent and it cut across all content areas and languages. Similarly, Greene conducted a meta-analysis and concluded that the use of at least some native language instruction, you know, in the instruction of limited English proficient children actually has moderate to beneficial effects on the development and academic achievement of these children. Say for example in our English medium schools if at least some concepts are imparted in Hindi or Tamil or Bangla, it would probably help children to sort of, you know, get some buffer while they are learning English, while they are picking up these concepts to become better and it sort of gives them that kind of advantage. Another seminal, you know, meta-analysis was conducted by Rolstad, Mahoney and Glass.

Glass is by the way the individual who actually devised the meta-analysis technique and they included 17 studies on bilingual education and they concluded that bilingual education was found to be consistently superior than all English or all Hindi kind of approaches and that bilingual education programs were actually instrumental in promoting academic achievement of students. So it seems like bilingual education is something interesting and there is a lot of literature that supports the implementation and, you know, promotion of bilingual education. Now in addition to these effects that we are talking about, the effects, you know, which are most overt in terms of academic achievements, grades and, you know, how a child is developing, there are also other

advantages that are associated with, you know, bilingual education. For example, bilingual education actually enables students to engage in wider communication across generations, regions and cultural groups. So for example, you know, if you were going to only an English medium school and you're restricting your communication to English with your friends and maybe you come back home and your parents are well educated, you're also restricting your, you know, talking to them in English, it happens, there is a chance that you would sort of lose connection with older generations.

For example, in my family, the grandparents and parents were not conversant in English and if I had restricted my communicative repertoire to only English, I would obviously lose touch with them. And again, there is a treasure trove of knowledge that needs to be, you know, that we need to pick up, that we need to learn from, you know, older generations. And if you're restricting education in a particular language and if you're not, you know, having this opportunity to, you know, talk to and engage with these older generations, we are actually going to be at a loss. Similarly, you know, you will not be able to communicate to people from different regions within your country itself if you're not really conversant in at least one more language than, you know, what is the language of your own region. For example, English seems to be the lingua franca in today's day and time for India, because there are so many languages that all of us speak.

And although it's from an, you know, unpleasant outcome of colonialism, but English has sort of become a language that everybody across India speaks. Say for example, if you are in the south, if you're in the northeast, it is quite possible that they do not know Hindi, but it is quite possible that they have some exposure to English. And if you can put together some broken sentences in English, there is a high chance that you will be able to communicate with these people, understand them better, understand their cultural practices better. And in that sense, have a better line of communication with them. Also going forward, I mean, just extending this point, it allows us bilingual or multilingual education allows students to deepen their engagement with cultures associated with minority languages.

It sort of encourages them for, you know, having a sympathetic and a more tolerant understanding of culture and linguistic differences, which obviously augurs well, makes you a well-grounded individual, contributes to overall holistic development and basically makes for a more cohesive society. For example, when I travel abroad, I see that there are Indian communities, Indian societies in most countries in the world for that matter, and where people are, you know, united because they are Indian as opposed to, let's say French or Dutch or Spanish individuals. And within the Indians group, you see that there are people who speak Tamil, Telugu, Bengali, Marathi, Hindi, and all of them are sort of glossed over their linguistic differences because all of them probably know, all of them

mainly know English and they can communicate in that. And therefore it makes for a more cohesive society if there are ways for communication, you know, with each other across linguistic and cultural boundaries. And that is certainly a very, very important outcome of bilingual or multilingual education.

Maybe it is one of the most important points because of which bilingual and multilingual education must be encouraged. Similarly, you know, bilingual or multilingual education basically allows us to access more diverse literary practices. For example, there might be loads of books written in other languages that we cannot, you know, be a party to, we cannot read because we do not know that language. They might have, I mean, for sure, no, there are several great poets in Tamil, several great poets in Bangla, in Malayalam, which I cannot read, which I cannot understand firsthand because I do not know those languages. So if you know multiple languages, if the language system, if the education system allows you to learn so many languages, it enables you to communicate, enables you to partake in the literary practices across different kinds of linguistic groups and cultural groups.

And basically also provides you with a broader understanding of the world, a more flexible perspective of the world. And in that sense, augurs very well for the overall cognitive and educational development, personalities, development of individuals. Obviously we have talked in the past about cognitive benefits that come with bilingualism and multilingualism, the flexibility, the task switching abilities, so many, you know, so many different kinds of abilities that sort of come with bilingualism and bilingual, multilingual education allows you to, you know, take benefit of that. Finally, bilingual or multilingual education provides one very important, you know, source of advantage, which is it opens up job opportunities, economic, you know, it opens up economic opportunities. Say for example, as a business person, you can conduct your business in many parts of the world.

If you know their language, you will be able to be employed. If you are a service person, you'll be able to be employed in different parts of the world. If you know their language. And in that sense, you know, it creates a, it creates a very solid reason why bilingual or multilingual education must be encouraged. Now, besides these economic things, besides the, you know, cognitive and academic attainment things, by the benefits of bilingual and multilingual education are also seen at societal level, at societal level, at larger level.

Say for example, it makes for better and more informed, better educated and more informed citizens. It makes for better social relationships amongst people. It makes for more cohesive communities. Like I was mentioning the example of Indian communities, the Indian diaspora across the world. It also makes availability for individuals who can

communicate across linguistic and political boundaries across international boundaries.

You know, you can understand each other, you can handle or deal with tourists, immigrants, diplomats, conduct businesses, you know, political and otherwise. And therefore, I would very strongly suggest that bilingual or multilingual education is a very, very important aspect. And definitely there are merits in considering that. And given that we are doing a course in bilingual bilingualism, I'm sure this is something that, you know, would benefit you to know that bilingual or multilingual education is a very, very you know, critical and an important area to focus upon. So that's all I wanted to talk to you about in this lecture. In the next lecture, I'll talk about a similar applied use for bilingual or multilingual education. So until then, goodbye and thank you.