



Exploring babies' and young children's development and learning

Cultural environment and individual development

Narr:

Michael Cole is Professor of Psychology at the University of California, San Diego, and is founding Director of the Laboratory of Comparative Human Cognition. In the early Seventies, he carried out some of the earliest cross-cultural studies on cognitive development. He is now one of the world's leading experts on cross-cultural research on the role of literacy and schooling in relation to cognitive development. Here he explains why members of the Laboratory take cultural differences among human beings as a starting point for understanding human mental processes.

Professor Cole:

I think if one stops to think about it what's unique about human beings is that we live in and we must live in an environment that has been transformed by countless generations of our predecessors so that if you just sit and look around you right now think about how many things that you can see which weren't either directly made by somebody else at a prior time or which haven't been changed in some way because of human activity. Even if you look out the window at least in Southern California where I live the colour of the sky has been transformed by the automobile fumes that are there. The trees are not the trees that ordinarily would grow there. Certainly the tables that we write on and the chairs that we sit on none of these things are natural objects and human beings as a species have as their sort of fundamental characteristic that they have to and they can take advantage of the all of the work that's been done all the way back to the people living in the caves at Lascaux and as far back as you go these things accumulate not in our germ cells in our body as natural things but rather as changes in the environment. And those accumulated changes in the environment that all of us experience when we're born, in fact in some sense even before we're born that's what I mean by culture and if we're to think about human development then we have to think about what's special about human development versus the development of hamsters or chimpanzees or something and it has to do with the cultural environment and the way that we interact with the world through that cultural environment.

Narr:

So, from what Professor Cole is saying, it seems that the cultural environment influences individual development right from infancy. What example can he give?

Professor Cole:

One of my favourite ones is just thinking about the process of what we mean by when the child is born of getting the child on a schedule. And we tend to think of that as a completely natural thing but in fact the way in which we get a child on a schedule - what food the child eats, what time the child eats, what time the child sleeps, where the child sleeps, with whom the child sleeps, all of those things are conditioned by the history of the group that we grew up in. So if your child growing up in Birmingham in England it's probably the case that your father and perhaps your mother both go to work at a particular time and you have to go to sleep at a particular time because you need a certain amount of sleep and so you will be on a very rigid schedule. Whereas if you were to grow up in a small west African village your mother probably carries you around on her back for six months a year, year and a half. You sleep a lot of the day. You're with her. You eat when you want to eat. She stops her work and she feeds you. And then you're left with your siblings for a while and they'll sort of take care of you. And the whole issue of scheduling is just entirely different. And it has a real impact on children's experience. Studies have shown that if you look at the longest sleep periods that children in the United States or England experience in the first three or four months, the longest sleep episodes get to be approximately seven, or eight or nine hours. In West Africa the longest sleep episodes are likely to be three hours and it takes a long time

before the child gets to have longer sleep episodes. And probably they are much more flexible about when they're asleep or when they're awake just for the rest of their lives as with all things cultural there's certain universal features of the way culture works but in every sort of cultural historical condition in fact often in different families the way those universal things are worked out will be quite specific.

Narr:

So what can be learned from doing cross-cultural studies?

Professor Cole:

There's an expression in American English and I assume it's in British English as well that very often the way in which we do things, it becomes second nature. And by saying it becomes second nature it means that we simply stop noticing them. I mean it's just what you do. And very often it's the case with culture that it's like the story of the fish that doesn't know the water is there until you pull it out of the water that when you go into a very different cultural setting you notice things that people there themselves just simply don't notice at all and what that does if you're a student of human development as I am is it breaks up a lot of pre suppositions about what's going on. It makes you look afresh at things. Anthropologists have this expression about what the value of going to other cultures is about, their point of view that I think applies well to study human development is that the purpose of going and studying another culture is to make the strange familiar and the familiar strange. And I think the cross cultural studies in human development very much have that purpose, that is things like the sorts of schedules that children are on or the kinds of things that they're expected to know what kinds of values they're going to adopt and so on is so much second nature to us that we really that we don't really notice that they're there. So it's a way of sharpening up your perception of what's all around you.

Narr :

What might cross cultural studies reveal about schooling, which is so much part of western experience?

Professor Cole:

It's an amazing thing about the study of child development in western Europe and in the United States that for many, many years psychologists have realised that somewhere between the ages of five and seven people notice there seems to be something of a sort of stage like change in the way children think and for a long time that was thought to be simply a universal characteristic of children. And nobody stopped to think about the fact that between the ages of five and seven all the countries where this kind of research had been done, that the experiences of children changes markedly where they stop being at home, where they start being in a group of children playing and free ranging so to speak. And they're sat down in a classroom with all the seats facing forward and there's thirty of them and there's one teacher there. And suddenly they're in a completely different environment. And to us it's so natural that that happens that we don't even stop to think that well gee - first of all it doesn't happen all over the world and second of all in England and the United States and so on it's a very new experience. It's only a hundred, hundred and fifty years that that's been a normal thing to do. And if you go back and study historically you'll find that actually formal schooling that we just completely take for granted that for twelve years of your life or something that you spend in this they take so much of it for granted that they can't think about it with respect to how children develop.

Narr:

So how does that 'taking for granted' impact on our understanding of the significance of schooling to development?

Professor Cole:

A couple of times a year I find stories that lament the growth of illiteracy in the world and the number of illiterates in the world is growing and that lack of literacy is like a cause of poverty. And that always surprises me when I encounter it because it's certainly the case that what schooling does it increases the tool kit of ways in which we can deal with the world. But the idea that people who haven't been to school are in some sense generally less intelligent than

the people who have been to school it's sort of conceit of people who have been through schooling And they just assume that of course they're, you know, they're more intelligent than other people. It's very striking to begin to understand that yes, you gain something through schooling but you lose something through schooling as well. And it seems to be that in the modern world the more we use technology the more the use of literacy and numeracy and variety of hi-tech kinds of capabilities are economically and socially important so we'd like our children to do well and to have more of it.

And it's clear that there's a lot of power associated with that and with the power comes wealth so people strive for it. But at the same time there is tendency to sort of totalise it as the only natural way to be in the world. And in fact it's not the only natural way to be in the world and in the long run it may be a very dangerous way to be in the world because that hi-tech society comes along with very high level uses of fossil fuels, with atomic energy, with modern nuclear war and with a variety of practices which could in fact end up annihilating the human race. What we want, I think, is to try and strike some kind of balance; a way of life that we can have in the world where we don't have to annihilate each other, where we don't eat the environment alive. And hopefully we can sort of turn schooling and scientific knowledge, turn it or control it so that it doesn't let the genie out of the bottle; it doesn't come to destroy us.

Narr:

Schools are culturally constructed entities, and impact on the way a child develops within that environment. What part does the child play in that process?

Professor Cole:

We're dealing with always with a double-sided process here. It's a process that when I have my development psychologist hat on I talk about sort of co-construction of human development, where the child is acting on the environment and the environment is acting on the child. So you have two sorts of active forces going there. The problem is how much symmetry is there in the two sides of the transaction? Where's the power in all of that? And we know with respect to schooling that if you get a really passive child, the child who is too good so to speak, and doesn't actively engage in the material, that child is not going to develop very far through the school curriculum; that the child has in some sense grasped and tried to take in and convert and use what it is that they're taught in school. and that's a big difficulty because the school also has as an institution has an authority structure in which the child is supposed to subordinate themselves and is supposed to take things in. And I think that we are really highly ambivalent in contemporary society about that and there are large cultural differences in that and within countries we have different philosophies. So within the UK and the United States we talk about child centred education. At the same time within these countries we have a notion of sort of traditional education which is much more trying to transmit culture rather than trying to arrange for the child to re-invent culture. Children are going to reinvent culture willy-nilly. They may for parts of the time for example in a maths classroom take a passive role and try and take everything in. But that will lead to grief in the long run and trying to find the right balance between sort of order and authority on the one hand and the activity of the child on the other that's something that every teacher in every class in every school has to deal with in terms of it's own community and what it's own community values are.