UNIVERSITY OF CAPE TOWN
IYUNIVESITHI YASEKAPA • UNIVERSITEIT VAN KAAPSTAD

WEEK 4 ANSWER TO QUESTION 4

STEP 4.7 ASK MARK

Here comes the fourth and last question. And again, it's an amalgamation of questions pulled together by our mentors, and here is what they've written.

In general, you're speaking of the healthy, adult, matured mind brain. Have you explored the developing mind-- that is, infant through teens? I want to better understand how to help these young minds better self-regulate. We know that babies who are physically well looked after-- fed, clothed, et cetera-- but emotionally severely neglected-- as some institutionalised babies are-- do not thrive bodily as well as mentally. They grow apathetic and uninterested in their environment-- not very different from your example of people with encephalitis lethargica. Can we say that a defining property of the mind is that it must have other minds to be a mind?

So first of all, it's probably correct that my default mode is to talk about the mind in its fully mature form. But I must emphasise that the instinctual mechanisms that I've spoken of are present from birth. It's this learning from experience as to how to marry your instincts with the external world, how to meet your needs in the external world. That's the developmental process.

So the developmental process has mainly to do with corticothalamic mechanisms which sort of mediate between these instincts which are there from birth and the outside world. And it really is simply a matter. It can be put as simply as it being a matter of learning from experience. That's what the developmental process is all about.

Certainly there are things that we know about critical periods. I've already spoken in one of the questions for this week about Konrad Lorenz's experiment about imprinting by little geese-- the attachments that happen at certain periods in the developmental sequence and that then can't be undone.

In our case, in the first six months of life, this happens-- us humans. And when we make those early attachment bonds is absolutely critical-- can't be done later. And things that go wrong with that process at that stage are going to have lifelong consequences-- like in the case of the institutionalised babies, the Rene Spitz work that's being referred to this question.

So what I'm saying is that, yes, it's very important to think developmentally. We have to think developmentally. There are things that happen at certain stages in the maturational process that can't happen at any other point. And once they've happened, they have lifelong consequences.

And it's not only the early years. There also are momentous changes that occur during puberty and during adolescence. And there's been a lot of work over the last decades on the adolescent brain. I don't know how many people know that our prefrontal lobes, which is our crowning evolutionary glory as humans. This is our evolutionary pride and joy that we've got these big, fat prefrontal lobes. What they do is-- more than any other part of the brain-- is inhibit, modulate, and regulate these instinctual emotional forces.

That part of the brain only reaches full physical maturity in your late 20s-- in your late 20s. So biologically speaking, you're sort of an adolescent pretty much until the end of the third decade of your life. And the relative immaturity of the prefrontal lobes in the years preceding your late 20s has everything to do with the way that teenagers behave.

And again, as I said, there is good research on exactly this. There's no question about it that the relative imbalance between the instinctual, that is to say emotional, limbic brain with all of its hormonal influences-- that when you have the hormonal surges of puberty regulated by a relatively inefficient and ineffective prefrontal cortex, then you're going to have exactly the sort of things that we see in teenage behaviour.

There's also very interesting research on sleep. You know, our kids of that age, they don't want to wake up early in the morning, and they want to go to sleep late at night. And there really is a difference in the sleep/waking cycle of our brains at that age than once you reach my age. They really are not properly awake early in the morning, those poor teenagers who then have to get shoved off to school when they're literally, physically, cognitively, incapable of managing.

So all of this just to say, yes indeed, a developmental perspective is terribly important. And that we do have interesting, new knowledge emerging all the time from a neuroscientific point of view to supplement what we've learned in previous decadee-- purely psychologically and so on.

But I want to particularly focus on these last two comments made in the question-- the one about the institutionalised babies being apathetic and uninterested in the environment and saying that they're not that different from the people with encephalitis lethargica.

What we are seeing there is a form of depression. It's called anaclitic depression-- what used to be called anaclitic depression. These institutionalised babies do indeed have down-regulated seeking systems. The system that motivates you, that interests you in the world, that makes you expect good things are going to happen-- this system is down-regulated. This dopamine system is down-regulated in those kids.

And the encephalitis lethargica epidemic attacked exactly that same system, except it attacked it physically. It wasn't a matter of functional regulation but actual tissue damage to that system. So although it's a much more extreme version, what the questioner is observing is a correct observation-- that the despair, the depression in those institutionalised kids is mediated by the same system as was attacked in the encephalitis lethargica epidemic.

Then the last thing I wanted to say was about this question right at the end. Can we say that a defining property of the mind is that it must have other minds to be a mind? And you can see where that comment comes from in relation to all the other aspects of this question. Implicit in the question is saying there's no such thing as a baby, to quote a famous English psychoanalyst, Donald Winnicott. He said there's no such thing as a baby, meaning a baby can't thrive without a caregiver-- that they're a unit. The one just doesn't make sense without the other-- literally can't exist without the other.

And so if you want to understand the baby, you have to look at the relationship between mother and baby. And if you want to understand the mind of the baby, the personality of the child that emanates from that baby, then you need to understand it in relation to the other mind or minds that cared for it. Because when we're learning about how to meet our needs in the world, the single most important influence on us is the adults who mediate the world for us when we're so little and helpless.

Us humans, we literally can not survive by ourselves. We have to be helped to survive in those early years. And we have to learn from those caregivers how to go about meeting our own needs, because we don't know how to. We have the-- as I said earlier in this session-- we have the tools for doing it. But they have to be attached to the world, and they can be attached in different ways to the world.

So I am very mindful and agree very much with the assertion implicit in this question. And assuredly you can't speak only of one mind. You have to speak of minds in relation to each other, especially during development. I agree with that very much.

However, the way that that's worded, I think is taking up a challenge that I posed a couple of weeks ago when I said that I've put forward four defining properties of the mental, four obligatory dimensions to the mental. And I said, maybe you disagree. Does anybody think that they can be reduced to less than four? Or does anybody think that they need to be added to-- that there should be more than four? And here seems to be one such suggestion. A fifth fundamental criterion of the mental is that it has to-- how was it worded here? Can we say that a defining property of the mind is that it must have other minds to be a mind?

I don't agree that this is a defining property of the mind in the sense that I've claimed for the other four defining properties-- the four that I've introduced you to. I think that implicit in the ones I've introduced you to, especially in relation to intentionality, that we always intend toward objects, toward the external world-- that our mental processes

necessarily involve representations of the outside world. Because our instinctual drives and needs require it to be so.

I think that includes the category that's referred to here-- that we need caregivers, that we have to attach to caregivers. This is why we have an attachment instinct-- and so on. All of these mechanisms cover already the fact that we have to relate to external objects-- including parental objects, which is what one of those instincts is about, this attachment instinct.

But I don't think that that elevates the mind or the object, one particular category of object, that we need to intend towards. I don't think it elevates it to a separate defining property of the mind. Let me put it semi-facetiously. We also need milk, or we need sustenance. We need food and drink, otherwise we'll die. Then there'll be no mind. So should we say that another defining property of the mind is food and drink? No, I don't think so.

So although I'm not wanting to diminish for a moment the importance of other minds for the maturational and developmental processes that this question has been all about, I don't think that other minds are a defining feature of a mind. Theoretically, a mind could be raised by robots, as long as they knew how to feed properly. It would be a very dysfunctional and sad mind, but it would be a mind nonetheless.

So thanks. Speak to you again next week. Bye-bye.