

Playtime With Mom Helps Boost Toddlers' Under-Developed Brains

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DAVID GREENE, HOST: Now we have a story about the power of play. Some 200 million toddlers in poor countries are starting life with an extra burden. Because of malnourishment or disease, these kids are small for their age and their brains are underdeveloped. The consequences of this can haunt them into adulthood. But here's some positive news - there's a study in the journal *Science* suggesting that more play time with parents can dramatically reverse the damage suffered by these kids. NPR's Nurith Aizenman reports.

NURITH AIZENMAN, BYLINE: The year was 1986, the place Kingston, Jamaica. Susan Walker and some other researchers from the University of the West Indies, they were driving around the city's poorest neighborhoods, a lot of one-room huts with no electricity. They were looking for children, children whose bodies and brains were developmentally behind. And they wanted children who were very young, babies as little as 9-months-old to toddlers.

SUSAN WALKER: Often, you could go into the home and see a child just sitting there, not really doing very much. There were very few toys in the home, very few things for the children to play with. There wouldn't be anybody actually necessarily sticking with the child and trying to engage them in an activity.

AIZENMAN: Walker and the others wanted to test a theory they had been working on - what if you could get the mothers to play more with their children? Would the stimulation help these kids' brains catch up? So they trained community health workers to go into the homes once a week for an hour to teach the mother's to engage more with their children. Like this.

(SOUNDBITE OF ARCHIVED RECORDING)

MARGARET CHATRIE: This is a cup. And the cup is a yellow cup. And you can drink porridge from the cup. And you can take milk from the cup.

AIZENMAN: That's Margaret Chatrie, one of the health workers. She says she often asked the mother to use item from the home.

CHATRIE: This is a spoon. And I would explain, this is a spoon and you take this spoon - and I would (imitates eating) - and you drink your porridge. And I will pretend, as if to say, I'm drinking porridge from the cup. Then I would put them down. And I would say to the child go and bring me the cup.

AIZENMAN: There were games, too. And this may seem like really simple stuff, but they just wanted the kids to engage with the world around them. These visits went on for two years. Then, the lessons stopped. But over the next two decades, the researchers kept checking in on the children. Each time they compared them to a group of similar small-for-their-age kids. Except for this. One group got no stimulating play lessons, another group got extra food instead of the playtime. And the children who got the play lessons, they consistently scored higher on tests of IQ, self-control and aggression. And as they reached age 20, well...

PAUL GERTLER: ...Well, we found something really remarkable.

AIZENMAN: Paul Gertler is an economist at the University of California Berkeley. He spearheaded the most recent part of the study.

GERTLER: We found the group that received stimulation, 20 years later, were earning 25 percent more than the group that didn't receive stimulation.

AIZENMAN: And he says that gap in how much money they make will probably only get bigger because more of the playtime kids are in college. Best of all, the playtime kids are now even with the final comparison group, kids who weren't small for their age. In other words, thanks to the playtime, they caught up. So now the study's authors are looking into how much these kinds of playtime lessons can benefit all poor kids, not just those who were small-for-their-age. But Paul Gertler says the takeaway for this research isn't just for poorer people.

GERTLER: I have lots of colleagues at various universities who have young kids. And every time I present this paper we go out for dinner, we go out for lunch. And the conversation always turns to have I spent enough quality time with my children, playing with them in ways that make them better off?

AIZENMAN: He says there's something about these results that touches every parent. Nurith Aizenman, NPR News.

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