Research shows promise for autism treatment

Psychology professor Mark Sabbagh.

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Preschoolers who show mature brain development in their neural circuits may develop social reasoning skills earlier than children who don't, a new study suggests.

Mark Sabbagh, a psychology professor at Queen's University, published his research in Child Development journal this month.

"One social reasoning skill, in particular, we develop is understanding that other people's external actions are because of other people's mental state," he said.

In other words, young children develop the ability to identify a person's beliefs and intentions as the cause of his or her behaviour.

"Three-year-olds can't do it," he said, "but between the ages of four and five, kids get really good at making judgements about other people's beliefs."

Sabbagh studied 29 typically-developing four-year-olds and found that those who were better at making such judgements showed more mature patterns of electrical activity, called EEG activity, in two areas of the brain.

Preschoolers with a neurodevelopmental disorder, on the other hand, generally have trouble developing this social reasoning skill.

"Folks with autism seem to have a real struggle in thinking about other people's mental states and nobody is really sure why," he said.

"Even autistic kids who are five years old and smart in other ways are not very good at understanding the role that beliefs play as a cause of human behaviour."

Sabbagh is now repeating his study with children who have autism, to find a possible correlation between their level of electrical activity and social reasoning development.

"What we're suggesting is that if there is a particular network within the brain that's important for (developing social reasoning), maybe something about this is impaired," he said.

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