Researchers found those with Fragile-X syndrome had delayed development in the brain region that responds to touch.

Doctors believe they may have discovered why many people with autism don't like to be touched or hugged even by their parents.

They studied individuals with Fragile X Syndrome, a well-known genetic cause of autism.

It is also the most common known cause of inherited learning disabilities.

The scientists found Fragile X results in delayed development of the sensory cortex, the brain region that responds to touch.

A domino effect triggered by the delay may cause this part of the brain to be wrongly wired.

Fragile X is caused by a gene mutation in the female X chromosome that affects the construction of synapses, vital connection points between nerve cells.

Because boys have only one X chromosome, they are more severely affected by the syndrome than girls.

As girls have two X chromosomes it makes less impact if one is defective. Boys are generally more likely to develop autism than girls.

The U.S. scientists, writing in the journal Neuron, studied mice with their own version of Fragile X. They discovered that the mutation in the affected animals blocked the production of a protein that directed other synapse-building proteins.

This meant the development of synapses was delayed in the sensory cortex.

'There is a critical period during late development when the brain is very plastic and is changing rapidly,' said study leader Dr Anis.
Contractor, from Northwestern University.

'All the elements of this rapid development have to be co-ordinated so that the brain becomes wired correctly and therefore functions properly.'

People with the syndrome suffer from 'tactile defensiveness' and become anxious and socially withdrawn, said Dr Contractor.

She added: 'They don't look in people's eyes, they won't hug their parents, and they are hypersensitive to touch and sound.

'All of this causes anxiety for family and friends as well as for the Fragile X patients themselves. Now we have the first understanding of what goes wrong in the brain.'

The research raises the possibility of intervening at the right time in a child's development to prevent the problem.

For more information on Fragile X syndrome visit The Fragile X Society's website

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My son is autistic and is so loving.. Kisses and hugs. But he will not look anyone in the eye..
He frightens easily a new situations and new people..

- SONIA, WARWICKSHIRE, 12/2/2010 13:54

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I'll tell you why autistic people don't like being touched. I, for one, being autistic, am very sensitive to touch (and noise; but that's another matter). If someone prods me in the arm to get my attention, I get very irritable because it, in fact, hurts!! I've been told that I'm feeling it like 10-or-more times more intense than another 'normal' person may feel. It's a very, very uncomfortable feeling, and it makes me feel worse because I realise the 'normal people' can't understand what I feel. So imagine how displeasing it is when someone throws open their arms to hug me!.

Fragile X or not, people who don't experience this still won't be able to fully comprehend what we feel first-hand.

- Emily, Poole, 12/2/2010 13:47

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I have a son on the autistic spectrom he is ten years old now. We only discovered he had autistic when he was five and like Kat from Durham our son is the most loving boy we know we also have a two year old daughter whom he adores. he loves contact with others and leads and pretty normal life He attends main stream school which has a support base which has other autistic children he has lots of freinds in and out of the base and does alot of out of school activities including Taekwondo (he just achieved his red belt) Our son understandsand is very aware of his condition and often likes to discuss it and helps us and the teachers deciding coping stratagies for himself when he finds things difficult.
Many children go on to lead normal happy lifes and have lasting friendships and relationships. I think this report is only focusing on the negitive and is putting children and people who live with autism in to a very small box.

- sarah, scotland, 12/2/2010 13:41

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My wife must be autistic...she hasn't given me a hug for years.
My wife must be autistic...she hasn't given me a hug for years.


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