- Fatherhood

Becoming a father changes your brain

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IT'S NOT only mothers who experience profound changes around the birth of a child; fathers also show measurable adjustments in brain structure and hormone balance, according to new research led by professor of psychology Dr Darby Saxbe at the University of Southern California in the United States.



Results from brain scans show that the cortex – the part of the brain responsible for higher cognitive functions – also changes in fathers, explains the director of the university's Neuroendocrinology of Social Ties (NEST) Lab in the American Psychological Association (APA) podcast Speaking of Psychology.

The changes are more subtle than in mothers, but nevertheless detectable, and they appear to promote the fathers' ability to care.

There are also changes in hormone levels.

The testosterone levels of many fathers fall after the birth, something associated with a higher motivation to look after the baby, she explains.

Less testosterone can mean more closeness to the child, as well as a better quality of relationship during the transition to parenthood.

At the same time, it was shown that partners of fathers with lower testosterone reported fewer depressive symptoms, provided that the relationship was good.

Poor sleep is a constant companion of young parents.

According to Prof Saxbe's research, lack of sleep is a consequence rather than a cause of brain changes.

Those who are particularly involved in caring for the baby often sleep less well, but the brain seems to want to "remodel" itself precisely for this purpose.

Her research also suggests that fatherhood is a real "development window" for the brain, comparable to adolescence or childhood.

"Every window of change is a window of vulnerability, but it's also a window of opportunity," says the professor, whose book Dad Brain is due to be published next year. Anyone who initially

feels that they are unable to concentrate like they used to need not worry immediately. This is because children boost their parents' memory: they sharpen their cognitive skills and parents have "more ability to remember and retrieve things" that are related to the child. Another key finding: fathers who take parental leave benefit, but mothers benefit even more.

They sleep better, are less stressed and show fewer depressive symptoms, Prof Saxbe's research showed.

"It was really the mums that had the biggest benefit."

Paternity leave is something that not only benefits parents, but the whole family.

"We know it has benefits for the children.

"We also know that it's beneficial for the partner.

"And I think that anything you can do to take the pressure off the family system is also a way of managing stress." – dpa