

Call from mother 'as good as hug'

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The working mother who cannot be at home to cuddle a distraught child can relax - her voice on the phone soothes as much as a hug, a study suggests.

US researchers put more than 60 girls in a stressful situation and monitored their hormonal responses when they were either phoned or hugged afterwards.

Their mother's voice produced virtually the same amount of the stress-quelling hormone oxytocin as physical comfort.

The findings appear in the journal Proceedings of the Royal Society B.

The girls, aged between seven and 12, were asked to make an impromptu speech and then solve a series of sums in front of a panel of strangers - experiences which sent their hearts racing and levels of the stress hormone cortisol soaring.

Mum on the line

For one group of girls their mother was on hand immediately afterwards to offer physical comfort - a hug, or an arm around the shoulder. Another group was handed a phone with mother on the line, while a third watched *March of the Penguins* - seen as an emotionally-neutral film.

Oxytocin - a hormone believed to be strongly associated with social bonding, and one which alleviates the effects of cortisol - rose in both groups to similar levels. Oxytocin levels in the film group did not increase.

"It was understood that oxytocin release in the context of social bonding usually required physical contact," said Dr Leslie Seltzer of the University of Wisconsin-Madison, who led the research.

"But it's clear from these results that a mother's voice can have the same effect as a hug, even if they're not standing there."



A baby can hear by the third trimester of pregnancy

Previous research suggesting physical contact was necessary to produce oxytocin in stressful circumstances was primarily carried out on rodents, therefore failing to take into account the very human impact of language, the researchers said.

Research has suggested that even in the womb a foetus - at least in the later stages of pregnancy - is capable of recognising its mother's voice.

But whether this has any emotional impact at this young age is unclear.

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<http://news.bbc.co.uk/go/pr/fr/-/2/hi/health/8675966.stm>

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