



What do babies really understand before and after they are born? We talk to Dr. Ross Thompson, a distinguished Professor of Psychology at The University of California, for the answers.

What can babies sense while in the womb?

During the last stage of prenatal development, the fetus can experience many senses, including touch, taste, and hearing. There is also reason to believe that smell and vision are well developed prenatally, although there are fewer stimuli for these senses to detect in the womb than for hearing and touch.

What can babies recognise at their birth?

Research studies indicate that babies can recognise the sound of familiar voices and other sounds at birth that they heard repeatedly prenatally. We also know that the fetus can be conditioned (that is, learn to respond to external stimuli, such as sounds or touch) in the womb, and that this learning can be displayed after birth.

Can fetuses recognise sounds and smells while in the womb?

There is good evidence that babies can recognise sounds, such as voices, while in the womb. Although the sense of smell develops before birth, there is less evidence of babies recognising smells while in the womb, probably because it is much more difficult to smell in the liquid interuterine environment.

How does bonding (talking or playing music) help development before birth?

Talking to the baby can contribute to the newborn recognising that adult's voice after birth, although it is not at all clear that this contributes to infant-parent bonding, which develops when the baby is older. I do not know of good evidence concerning the influence of playing music before birth on the bonding process.

What do babies understand when they are born?

As the preceding answers indicate, babies distinguish things that are familiar from things that are unfamiliar when they are born. Because of this, their eyes and ears are attentive to new things, and they will focus attention on new stimuli as they are learning about the environment.

At what age do babies recognise their parents and other family?

Babies begin to recognise familiar people, including their parents, during the second month of life, based on their recognition of the sound of the person's voice, their smell, and later their face.

What do you recommend expectant parents to do in order to ensure maximum bonding before and after birth?

Time with the baby that is devoted to responsive social interaction, involving talking to the baby, looking and smiling, responding to the baby's facial and vocal expressions, and creating mutual pleasure is a good strategy for promoting bonding after birth.

Any additional information?

A parent really cannot spoil a baby during the first year. Babies thrive on the warm, responsive attention they receive from those who provide care and love.

*Dr. Ross Thompson recently spoke at a monthly public seminar series of leading international and local thinkers and innovators in Abu Dhabi. The seminars are hosted by the Salama bint Hamdan Al Nahyan Foundation, which develops, supports and funds strategic initiatives in the areas of Arts, Culture & Heritage, Education, and Health.*

*Dr. Thompson's work focuses on early personality and socio-emotional development in the context of close relationships, an interest that contributes to the cross-disciplinary field of developmental relational science. Dr. Thompson has served twice as Associate Editor of Child Development, was a Senior NIMH Fellow in Law and Psychology at*

*Stanford University in 1989-90, and served on the Committee on Integrating the Science of Early Childhood Development of the National Academy of Sciences (1998-2000). He received the Ann Brown Award for Excellence in Developmental Research in 2007.*

*By Time Out Dubai Kids staff*

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