

# What About The Children?

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*'Raising awareness of the never-changing emotional needs of the under-threes in our ever-changing society'*

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## Research Summary

**Early concepts of intimacy: Young humans use saliva sharing to infer close relationships.** Thomas AJ, Woo B, Nettle D, Spelke E, Saxe R  
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To become competent members of their society young infants in cultures across the world must first learn how people around them are related to them, and to each other. Part of this process will be learning to distinguish special groups of relationships that are known as 'thick' relationships. This type of relationship features strong levels of attachment, obligation, and responsiveness. These often are expressed through a sharing of bodily fluids, like a kiss, or sharing food utensils, such as happens between parent and child. Experiments have shown how even very young children, who are not yet able to verbally label such relationships, early on, learn to identify significant relationships which can be described as 'thick'.

In a series of experiments conducted at Harvard University young children, were able to interpret that sharing utensils, or licking the same piece of food, generally occurs between members of nuclear families. Whereas sharing toys and food can occur within friendships, as well as families. Other experiments demonstrated that even very young infants and toddlers were able to distinguish different kinds of relationships. For example, in one experiment, an actress takes turns to eat from an orange slice with a puppet, and then another actress plays ball with the same puppet. Then, the puppet seated between the two actresses was shown to express distress. Both toddlers and infants looked first at the actress, who had shared food (and saliva) with the puppet, and for longer, rather than the actress who had played ball with the puppet. The youngsters had expected the 'saliva sharing' actress to react to the puppet's distress. This suggests that toddlers and infants *are* able to infer a 'thick' relationship, even between individuals not known to them.

This experiment showed that toddlers and infants only looked towards the food and saliva-sharing actress when the puppet expressed distress and when the puppet in distress had been demonstrated as the actress' own close ('thick') relation. If the puppet was removed, both toddlers and infants looked at each actress equally. Additionally, if a new puppet was placed between the actresses, and then expressed distress, none of the youngsters had looked first or longest at the saliva-sharing actress. This suggests that toddlers' and infants' expectations focus on the *relationship*, not behaviour.

In a further experiment, a larger group of toddlers from a diverse range of households were shown to expect that people who share food and saliva respond to each other's distress. In the case where an actress put her finger in her mouth, then in the puppet's mouth and finally in her own mouth again, toddlers looked first at, and longer at, this puppet than at a puppet where the actress touched her own and the puppet's forehead when the puppet expressed distress. Older children, on the other hand, looked equally at each puppet first, but looked longer at the puppet from the mouth-to-mouth interaction.

Other experiments demonstrated that toddlers and infants will look towards the mouth-to-mouth puppet only if the actress in distress was the original person in the interactions, and only when the actress expressed distress.

In a further experiment, another group of toddlers looked to the 'mouth-to-mouth' puppet when the actress expressed distress, but not when she said a nonsense word. This suggests that most toddlers expect saliva sharing to selectively predict responses to distress.

A survey of parents of infants and toddlers suggest this inference is valid. Parents appear to be comfortable with their child having positive social interactions, such as playing or hugging, with people in many different types of relationships, but only expressed comfort with saliva-sharing interactions, such as kissing on the face, in relationships that were assessed as 'thick' (such as within their own family). Saliva-sharing interactions provide observable cues of 'thick' relationships and young children use these cues to predict subsequent social interactions.

Previous research has shown that infants have an 'intuitive psychology' which supports inferences about the individuals around them. It is possible that an early intuitive distinction between thick and thin relationships allows infants to accurately interpret the distinctive behaviours that occur in relationships in the environments they encounter.

Further research is needed to establish whether thick and thin relationships are distinct, or are ends of a continuum where close friends, for example, may have a mixture of features. Saliva sharing may only be one example of a set of interactions that young children observe to distinguish thick (ie close) relationships. There may also be a need to establish whether young children can distinguish the significance of more aggressive forms of saliva transfer such as, for example, spitting, from more benign interactions.

This series of experiments demonstrated that even very young children, can make distinctive inferences about 'thick' relationships. This has broad implications for their social/emotional development. Saliva-sharing has been shown to be a distinctive psychological mechanism by which infants can establish thick relationships. The pattern of who does, or does not, share saliva appears to help infants establish their earliest understanding of the concept of 'family' and to distinguish people who are close family, such as parents or grandparents, from those who are not family, such as day-care staff.

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