

## **Research Summary of the information presented in the video Skin-to-skin contact: Benefits to you and your baby**

One of the few mother-infant skin-to-skin contact (SSC) studies involving full-term infants and following the mothers and infants beyond the immediate newborn period was done in Nova Scotia. The mothers and babies were seen when the babies were 1 week, 1 month, 2 months, and 3 months. The findings showed that SSC benefited the babies and their mothers too!

1. The babies in the SSC group showed earlier responsiveness to their mothers. At 1 month, the babies in the SSC group reduced their positive vocalizations towards their mothers when she stopped responding to them. This indicates that the babies in the SSC group noticed the change in the mother's engagement. Babies in the control group did not notice this change until 2 months. But by 3 months, infants in the SSC group actually increased their positive vocalizations towards their mothers when she stopped responding to them; they were playfully calling to her. This shows these babies were aware that they could do positive playful things to get their mothers to engage with them again. Usually this kind of behavior is not seen until several months later.
2. Mothers in the SSC group were more likely to maintain the decision to breastfeed (if that was their decision). The percentage of SSC and control group mothers who were breastfeeding their infants at 1 week was similar. But fewer control group mothers were breastfeeding in each of the following visits, whereas all of SSC group mothers who were breastfeeding at 1 week were still breastfeeding at 3 months. This is important because mothers who maintain the decision to breastfeed their infants for 3 months are likely to continue to breastfeed beyond 3 months. The World Health Organization recommends breastfeeding until babies are at least a year.
3. Mothers in the SSC group reported less postpartum depression when their infants were 1 week and 1 month. When the infants were 2 and 3 months, there was no difference between the groups in postpartum depression. The first few weeks of an infant's life are the most emotionally demanding on the mother because her body is adjusting physically

and hormonally, and she is adjusting behaviorally and socially to her new role as a mother. SSC seems to protect mothers during this time of adjustment.

These mothers and children who had been in the SSC study in the children's infancy, were revisited when the children were 9 years old. The Nova Scotia study is the only long-term follow-up study of SSC with full-term infants. Long-term follow-up studies of the effects of SSC are rare. Only two such studies have been done before and both were with children born premature. In our follow-up study, the children did a number of tasks that looked at the children's attachment relationships, emotional understanding, self-esteem, language, and reasoning abilities. Most of these tasks showed no difference between the children who had been in the SSC or the control groups years earlier. However, one task showed lingering benefits of SSC. The children and their mothers who had been in the SSC group in the children's infancy showed more engagement, cooperation, and mutual respect when in conversations about remembered emotional events in the children's lives. The children were more willing to explore their emotions, both positive and negative emotions, and more readily accepted their mothers' contributions to the conversation. Mothers who had been in the SSC group were more able to guide and support their children through these conversations. Interestingly, the previous long-term follow-up studies of SSC done with children born premature also found that the children and mothers who had been in the SSC groups showed similar benefits when talking about emotions. SSC appears to help the mother-infant relationship get off to a good start, which increases the likelihood that the relationship will continue to flourish as the child matures, perhaps particularly in the realm of emotional engagement and understanding.

We thank all the mothers and children who participated in this research. It is through their participation that new ways of helping babies grow into children who are secure and confident are discovered. Below is a link to DVDs made after the infancy study and a list of the publications that have come from the infancy and follow-up studies.

#### DVDs

Bigelow, A. & Gillis, D. (2010). *Enhancing Baby's First Relationship: A Parent's Guide for Skin-to-Skin Contact with Their Infants* (for parents; 20 min) and *Enhancing Baby's First*

*Relationship: Results from a Study on Mother-Infant Skin-to-Skin Contact* (for practitioners; 28 min). <https://people.stfx.ca/abigelow/dvds-mother-infant-skin-to-skin-contact.htm>

#### Publications

- Bigelow, A. E., & Power, M. (2012). The effect of mother-infant skin-to-skin contact on infants' response to the still face task from newborn to three months of age. *Infant Behavior and Development, 35*, 240-251.
- Bigelow, A. E., Power, M., MacLellan-Peters, J., Alex, M., & McDonald, C. (2012). Effect of mother-infant skin-to-skin contact on postpartum depression and maternal physiological stress. *Journal of Obstetric, Gynecologic, and Neonatal Nursing, 41*, 369-382.
- Bigelow, A. E., Power, M., Gillis, D.E., MacLellan-Peters, J., Alex, M., & McDonald, C. (2014). Breastfeeding, skin-to-skin contact, and mother-infant interactions over infants' first three months. *Infant Mental Health Journal, 35*, 51-62.
- Bigelow, A. E., Power, M., MacLean, K., Gillis, D., Ward, M., Taylor, C., Berrigan, L., & Wang, X. (2018). Mother-infant skin-to-skin contact and mother-child interaction nine years later. *Social Development, 27*, 937-951.