



**LYDIA CURDTS ('16)**  
**PSYCHOLOGY AND LINGUISTICS**

**Project**  
*The Development of  
Face Maps during  
the First Year*

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Individuals possess functional maps of the body that enable them to use their hands to localize targets positioned on the skin. These functional maps have great adaptive value. They enable individuals to engage in self-feeding and remove stimuli from the body, and they may also contribute to a sense of self (Amsterdam, 1972). Little is known, however, about the origins of such body maps. Here we investigate the early development of face maps in infants.

In a longitudinal design, small vibrating discs were adhered to eight facial locations. Each session consisted of the discs presented individually in random order. Locations included the chin, left and right sides of mouth, under the left and right ears, and the center, left and right temple. Infants (N=16, 8 males) participated in approximately biweekly sessions from two months until successful manual localization of the discs. Data collection is ongoing with additional infants enrolled.

Trials were coded for whether or not infants manually contacted the vibrating disc (inter-rater reliability,  $k=0.994$ ,  $p<.001$ ). For trials in which infants manually contacted the buzzer, hand posture was coded as involving the front/back of the hand only or extension of the fingers (inter-rater reliability,  $k=0.660$ ,  $p<.001$ ). Using the palm, back of the hand or fist to contact the buzzer was coded as 0, while a one- or multiple-finger touch, or a pincer- or four-finger grip was coded as 1.

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