



## Maternal Iodine Supplementation: Clinical Trials and Assessment of Outcomes

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### PRESENTATION ABSTRACT

#### The Development of Manual Skill

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#### Abstract

Prior work on the development of skilled manual behavior in infants and young children has often focused on developmental milestones. Less attention, however, has been directed toward understanding (a) the mechanisms that enable the achievement or performance of these behaviors and (b) subsequent developmental changes in these skills once a given milestone is achieved. In my presentation, I will focus on four areas of manual skill in young children: reaching, object manipulation, tool use, and problem solving. These manual skills are integral components of many forms of cognitive activity. I will highlight new findings and methodological advances in each of these areas that enable us to address questions about developmental mechanisms and subsequent developmental change once a basic milestone has been achieved. Implications for more thorough and sensitive developmental assessment will be considered as well.

#### References

1. Bushnell, E. W., and Boudreau, J. P. (1998) "Exploring and exploiting objects with the hands during infancy" in K. Connolly (Ed.), *The Psychobiology of the Hand*, pp. 144–161, Cambridge, UK: Mac Keith Press
2. von Hofsten, C. (2004) An action perspective on motor development. *Trends in Cognitive Science*, 8, 266-272.
3. Kahrs, B. A., Jung, W. A., & Lockman, J. J. (2013). Motor origins of tool use. *Child Development*, 84, 810-816.
4. Keen, R. (2011). The development of problem solving in young children: A critical cognitive skill. *Annual Review of Psychology*, 62, 1-21.



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