

## **Marjolijn Blom**

Culturally regulated early experience and the establishment of diurnal rhythms in the Netherlands and the US. Paper presented at the meeting of the International Society for the Study of Behavioral Development, Symposium on The cultural organization of rest, stimulation, arousal, and reactivity in early infancy (S. Harkness & J.H. Rha, convenors), Melbourne, Australia, July 2006.

Authors:

**Marjolijn Blom** (University of Connecticut, USA and University of Amsterdam)  
Charles M. Super (University of Connecticut, USA)

Contact: [m.j.m.blom@uva.nl](mailto:m.j.m.blom@uva.nl)

Laboratory studies using animal subjects have established the importance of prenatal experience and ecological variables in the establishment of diurnal rhythms of rest and activity in early life. This paper draws on data from the International Baby Study to explore parallel phenomena in Dutch and US infants. Analysis of maternal diaries during the last trimester of pregnancy demonstrate group differences in the organization of rest and activity, similar to the infant findings reported elsewhere in this symposium. In addition, Dutch mothers experienced more extensive and more regular exposure to sunlight, due to differing cultural patterns of activity and transportation. Maternal cortisol from saliva samples also demonstrate Dutch-US differences in the level of HPA-axis activity. Parallel analyses of infant diaries and saliva samples at 6 months will be reported with particular attention to the establishment of diurnal rhythms in physical and hormonal activity. The relationship of maternal prenatal regularity and infant postnatal regularity will be explored both within and across the two samples in order to assess whether the pattern of results parallels experimental findings with animal models.