



# Perception of different age groups in infancy

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## Which age group do infants prefer?

Observation in a natural setting and parent report indicate that infants are more interested in older children than in other infants or adults. Nevertheless the empirical evidence is limited and ambiguous (McCall & Kennedy, 1980; Sanefuji, Ohgami & Hashiya, 2005) Consequently we add psychophysical measurements to the standard behavioral ones in order to gain more information about infants' attention.

### Participants

6 month-olds, N=31, M= 6 months, 6 days  
range= 5;22 - 6;14  
9 month-olds, N=29, M= 9 months, 1 day  
range= 8;19 - 9;14  
12 month-olds, N=28, M= 12 months, 6 days  
range= 11;20 - 12;14

### Procedure

12 films (10 sec) with different models (4 models each age category) were successively presented. The order of films was pseudo-randomized. The presentation was divided into 4 blocks with 3 films (1 film of each age category). Each film was presented for a second time after completion of the first presentation.

## Attention measurements

**Behavioural**  
Looking time  
Banging

**Psychophysical**  
Heart rate  
(Periods of focussed attention correspond with decreased heart rate)

## Stimuli

Infant

Child

Adult

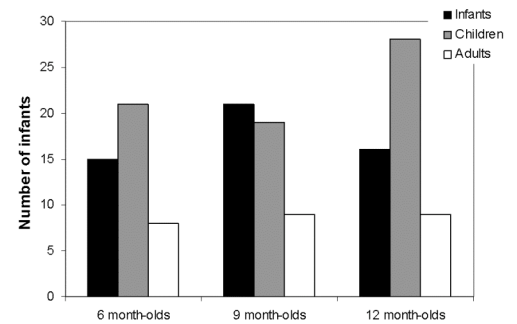


4 Models each age category (infant of the same age group, 3.5-year-old child, adult)

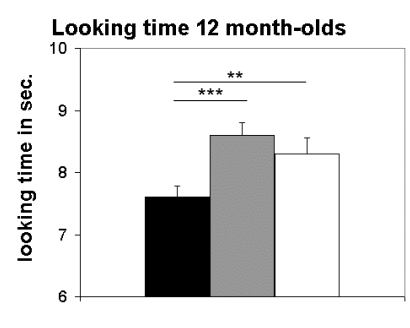
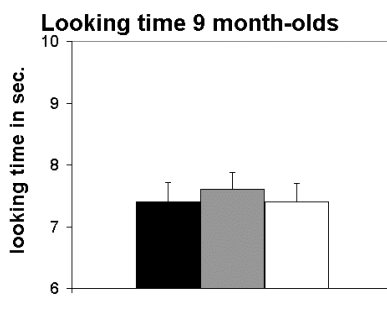
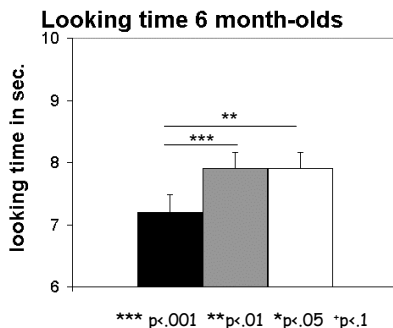
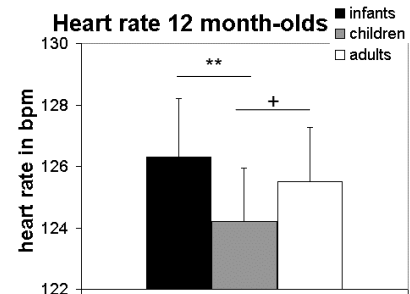
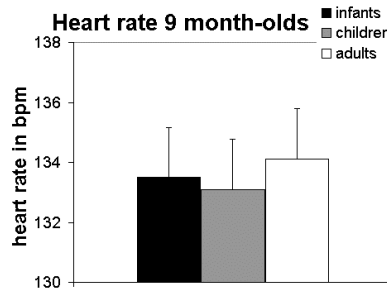
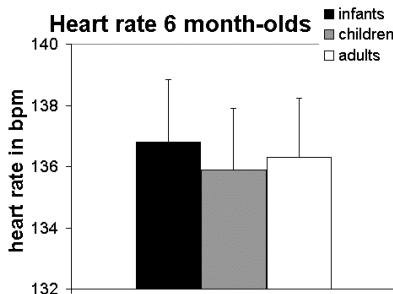
2 females, 2 males each age category

2 toys (yellow rubber duck, multi-colored soft cube)

## Parent report: "Which age category does your child prefer?"



## Results



## Discussion

Infants at the age of 12 months have a decreased heart rate when perceiving older children compared to the perception of other infants at the same age and adults. This means that their attention is more focussed when older children are perceived. This finding is particularly confirmed by looking time. But looking time yields no differentiation between adults and older children. The findings of heart rate and looking time are supported by parent report that their child prefer children at the age of 12 months.

An upcoming experiment will test if this preference is based on the visual appearance or on the difference in the motor function. A second experiment will test if this preference holds true in an imitation task.

McCall, R.B. & Kennedy, C.B. (1980) Attention of 4-month infants to discrepancy and babyishness, *J. Exp. Child Psychol.* 29, 189-201.  
Sanefuji, W. (2005) Infants' preference for infants and adults. *Proceedings of 2005 4th IEEE International Conference on Development and Learning*