

# **Prof. Dr. Markus Paulus – Research Focus**

## **1. Empathy, prosocial behavior and morality**

This research area comprises the origins and the early development of prosocial behavior, in particular comforting, helping and sharing. From which age and in which situations do young children show empathic behavior? Why do children help? Under which circumstances do they share with others? And which expectations do children have regarding the prosocial behavior of others? How do moral concerns emerge and develop over the first years of life?

## **2. Social understanding, social learning and cooperative behavior**

A long-standing interest is the investigation of the development of action understanding and social learning, in particular of imitation in infancy and learning through social cues. How are infants actually able to imitate other people? Why do they imitate some actions but not others? How does an understanding of other people's actions develop? And how do these emerging abilities contribute to young children's increasing ability to act jointly and cooperate with other people (for instance, solving a task together)...these are only a few examples of the questions that interest me in this area.

## **3. Meta-cognition**

This research area focuses on the development of metacognition that is our knowledge about our own cognitive processes (for example, "I know that I don't know."). Previous research suggests that metacognition develops from the primary school age. In our work, we want to investigate the early development of metacognitive abilities in the preschool age (for example, when/how do children know that they do not know something). We also want to know to what extent older children and adolescents (are able to) use their meta-cognitive abilities to direct their own learning behavior.

## **4. Development of action control**

Closely linked to the research questions above, is our interest in the early development of action control. From which age and in what way do young children learn to control their actions intentionally? How can developmental differences in action control be explained? What role do social factors play in the genesis of action control?

## **5. Systems theoretical approaches and counseling / family therapy**

Another field of interest concerns the dynamic systems approach within developmental psychology. Here we are investigating, for instance, the interaction patterns between children or family members. Relations to systemic counseling- and therapeutic approaches, such as couple and family therapy, are of interest.

## **Methods**

Our methods range, depending on the research question, from behavioral observations in experimental settings (laboratory, kindergarten) or in naturalistic interaction environments (for instance mother-child interaction) to the use of modern eye-tracking method for the analysis of children's gaze behavior and EEG / fNIRS to examine neurocognitive correlates.