The ability to know that someone else might have a different belief from yourself is something that, as adults, we take for granted. However, for children, this has been thought to be a particularly late developing capacity. In a typical test for this ability (known as ‘false-belief’), a child watches as another person (Sally) places a toy in one of two boxes. The child then sees Sally leave the room and whilst she is away, Anne sneaks in and, in full view of the child watching, takes the toy from the box in which Sally left it and puts it in the other box. When Sally returns to the room, the child is asked where she will look for her toy. As adults, we know that Sally will look for her toy where she left it because that’s where she should think it is. However, we know differently – we know that the toy is now where Anne put it. Before the age of about 4 years, children will say that Sally will look for the toy where is actually is, rather than where Sally thinks it is. They appear to show an inability to reason that someone else (Sally) may have a false belief because they presumably think that other people should have the knowledge that they have, having witnessed the switching of the toy by Anne.

With the Hidden Ball study, we are using an eye tracker to find out whether 18-month-old children might know something about where a person with a false belief might look for a toy. The language component of the typical task might make it difficult for children to work out what the experimenter wants of them, and so the task that we have designed removes any language component. In this task, we simply look where the child looks before one of the doors opens and the person searches for the toy. If they have any understanding of false belief that they are unable to convey with verbal measures, they might be more likely the show us this understanding with they eyes and look towards the door that the experimenter should open if she wants to search for the ball, based on her incomplete knowledge of the situation.