# Investigating the impact of social and biological cues in children's perception of humanoid robots

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**Abstract**

Imitation plays a key role in learning cultural knowledge. Young children imitate human models as well as humanoid robots, even when their actions are clearly non-functional to achieve a given goal. This so-called overimitation is possibly motivated by the desire to socially affiliate. This study clarifies the impact of social cues (greeting, eyes, friendly voice) and smooth, dynamic body motion of humanoid robots on rates of overimitation. In one condition, we remove all social cues. In another condition, we change the dynamics of robot movement to be less biological. Overimitation rates will be compared across all three conditions (social & biological, non-social & biological, non-social & non-biological) to learn more about important model characteristics that support cultural learning. Children aged 5-6 participated in this study. We discuss results and implications for using humanoid robots in interactive settings with children.