

Two-Year-Old Children's Observational Learning in Tool-Use Contexts: Imitation versus Emulation

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Recent research has challenged whether what is typically called imitation in developmental psychology may be understood as a host of non-imitative processes discussed in the comparative literature. In this study, we tested young children's imitation and emulation learning using a modified trap-tube task that has been devised to investigate tool use in ethological studies. In the four experimental conditions, 2-year-old children watched as a reward was released or trapped. In two human conditions, they observed the experimenter attempt either successfully or unsuccessfully with a tool stick. In two ghost conditions, they saw the tool move as if self-propelled and mimic the object movements involved in the experimenter's correct solution or failed attempts. Two control conditions included a baseline and an action control in which the experimenter manipulated particular locations with irrelevant acts. Results indicated that, regardless of success, only following human demonstrations did children imitate the tool-use more than did those in the ghost and two control conditions. Children in these latter conditions did not differ in the tendency to use emulation to solve the task, and emulated more than did children seeing human demonstrations. Despite the relative tendency to emulate the goal of the task, the study suggests an important role of observing human modeling for children's learning about tool-use through imitation.

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