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Kindergartners' performance in two types of imaginary perspective-taking.

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Summary: This study aimed at gaining further understanding of kindergartners' performance in imaginary perspective-taking (IPT) by examining whether they can imagine what is visible from a particular point of view (IPT type 1: visibility) and how an object or scene will look from a particular point of view (IPT type 2: appearance). The sample consisted of 4- and 5-year-old kindergartners in the Netherlands ($N = 334$) and in Cyprus ($N = 304$). IPT abilities were assessed by a paper-and-pencil test of various perspective-taking pictorial tasks. The study showed that the Dutch children performed generally better than those in Cyprus. In both countries the IPT type 1 items were on average significantly easier than the IPT type 2 items. This was confirmed by a statistical implicative analysis by which the relationships between the individual items of both IPT types were investigated and which revealed that some items are less or more difficult than other items of a particular type. Regarding the influence of children's characteristics, in both countries it was found that mathematics ability was significantly related to IPT performance, whereas this was not the case for gender. Contrary to Cyprus, in the Netherlands the children in the second year of kindergarten had a significantly higher IPT performance than the children who were in their first year.

Classification: G21 C31 C41

Keywords: imaginary perspective-taking; visibility; appearance; spatial reasoning; kindergartners

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