

“Is it moral or strategic?”: Prospective and strategic thinking in school-age children

Cinzia Di Dio (Università Cattolica del Sacro Cuore, Milan), Elisabetta Lombardi (Università Cattolica del Sacro Cuore, Milan), Ilaria Castelli (University of Bergamo), Davide Massaro (Università Cattolica del Sacro Cuore, Milan) and Antonella Marchetti (Università Cattolica del Sacro Cuore, Milan)

Abstract

Decision-making represents a fundamental aspect of social behaviour. Studies on decision-making during development have commonly addressed constructs such as fairness, altruism and inequality aversion, often discussing them against behavioural, relational, socio-economic and neurocognitive factors. Compared to altruism, fairness is firstly hallmarked by the sense of reciprocity, according to which individuals accept or refuse a certain offer to positively or negatively repay the other and its notion is strongly in line with the classical studies on the development of the sense of justice and equity as considered by rationalist models on the development of the moral sense. Sensitivity to fairness emerges in early infancy and develops between 3 and 8 years of age. A component that, in our view, greatly affects the outcomes of these decisional tasks is prospective thinking, which critically involves a temporal aspect of decision making, insofar poorly addressed to. A decisional task that clearly involves this temporal component is delay of gratification, and namely the capacity to forgo current gains for greater future outcomes. Here we present data from ninety-four children clustered in three age-based groups (6, 8 and 10 years), who underwent three different decision-making tasks, and namely an intertemporal choice task, testing their ability to delay gratification; the dictator game, assessing altruism; and the ultimatum game, assessing fairness/inequality aversion. By relating results from the three tasks, our findings highlight overall changes in the children's approach to decision-making, particularly at age 10, when the relationships between the manifold components of decisional dynamic are differently shaped. Such changes appear to be associated with a greater control to delay gratification, reflecting the ability to account for outcome optimization when making decisions. We suggest that this is due to the use of prospective thinking, which allows children to fully assess the advantages and disadvantages of the different decision strategies.

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