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Young children heed advice selectively

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ABSTRACT

A rational strategy to update and revise one's uncertain beliefs is to take advice by other agents who are better informed. Adults routinely engage in such advice taking in systematic and selective ways depending on relevant characteristics such as reliability of advisors. The current study merged research in social and developmental psychology to examine whether children also adjust their initial judgment to varying degrees depending on the characteristics of their advisors. Participants aged 3 to 6 years played a game in which they made initial judgments, received advice, and subsequently made final judgments. They systematically revised their judgments in light of the advice, and they did so selectively as a function of advisor expertise. They made greater adjustments to their initial judgment when advised by an apparently knowledgeable informant. This suggests that the pattern of advice taking studied in social psychology has its roots in early development.

Introduction

To be successful agents, we need to make accurate judgments. However, the world is complex and uncertain, and we have only limited resources—both temporal and cognitive—to explore it. If we based our judgments solely on our own knowledge and experience, they would, in most cases, be overly simplistic and ultimately insufficient. A powerful means to circumvent this problem is what Deutsch and Gerard (1955) termed *informational social influence*—making use of the knowledge of others. In their framework, Deutsch and Gerard differentiated between *informational social influence* and *normative*

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social influence. The former (sometime also termed *conversion*; Jaswal, Lima, & Small, 2009) means adopting the views of others because they are perceived to be more accurate; that is, informational influence is the result of an epistemic motive. In contrast, normative influence (sometimes termed *compliance*; Jaswal et al., 2009) means that one publicly (but not privately) adopts the views of others in order to be liked by them. Several fields of research have investigated how we use social information to make more accurate judgments. The current article integrates two of these lines of research: social psychological research on advice taking in adults and developmental research on selective trust in children. We do so by drawing on adult social psychology and modifying the experimental paradigm used in research on advice taking in order to develop a task format for testing advice taking in young children. In this way, we aim to reduce the divide between the two research programs with regard to the scope and sophistication of early selective trust and the ontogeny of advice taking.

Children's selective trust in some (but not all) information gained from other agents has been the focus of much recent work in cognitive development. Studies in this area have shown that the capacity to systematically and selectively acquire new knowledge by testimony develops during the course of the preschool years. From around 3 or 4 years of age, children learn novel words and facts from informants selectively as a function of their individual characteristics, for example, preferring knowledgeable over ignorant, confident over unconfident, previously reliable over unreliable, and adult over peer informants (e.g., Jaswal & Neely, 2006; Koenig & Harris, 2005a, 2005b; for review, see Harris, 2012). Thus, when young children are ignorant about some matter (e.g., not knowing the name or function of a novel object), they selectively accept information from others.

But accepting new knowledge is something different from—and arguably less complex than—revising one's prior judgments. So, a central question is the following: Do children selectively accept information from others in cases where they have made a judgment, and in particular how far do they selectively revise their judgments in light of the advice provided by others? Young children are generally capable of weighting what they have perceived against information provided by adults. For example, when confronted with a perceptually ambiguous object such as a flying fish looking more like a fish than a bird, children from 2 years of age who are left to their own devices tend to call the creature a fish and claim that it lives in a lake, whereas children who hear an adult call it a bird tend to call it a bird and claim that it lives in a nest (Jaswal, 2004; Jaswal & Markman, 2007). A related line of research has shown that young children give up their initial uncertain beliefs about the identity of an object in response to another agent's advice if this agent evidently had perceptual access to the object (Robinson & Whitcombe, 2003).

However, what remains unclear from such studies is whether young children engage in selective belief revision in response to advice in more systematic ways. Do they differentiate between good and bad informants not just on the basis of their perceptual access but also on the basis of other epistemically relevant attributes such as their track record and reliability? Do they engage not just in categorical belief revision (replacing one belief [e.g., that the object in question is an X] with another belief [that the object is a Y]) but also in more fine-grained adjustments, for example, of quantified beliefs?

From a different line of research, we know that preschoolers engage in Asch-style, conformity-based revisions of their public judgments in light of judgments publicly expressed by a consensus. Thus, when children first needed to judge which of several lines was the longest ("A" was the obviously correct answer) and then heard a consensus publicly judge "B", they often conformed to the consensus in their public judgment (Corriveau & Harris, 2010; Corriveau, Kim, Song, & Harris, 2013; Haun & Tomasello, 2011). However, conformity in such contexts is typically due to a *normative* influence rather than an *informational* influence (Deutsch & Gerard, 1955). Control experiments made it very clear that children did not actually revise their *beliefs* in this situation; they only revised their *public pronouncements*.

In sum, we know that children accept information from others selectively in situations where they lack any information themselves, that they adapt their publicly expressed judgments in light of others' social influence, and that they revise some of their categorical beliefs in light of advisers with better perceptual access. However, we do not know whether children revise their judgments on the basis of more general types of social information in a rational and selective fashion. In particular, we do not know whether children revise their initial judgments to a greater or lesser extent depending on the apparent competence of an advisor.