



Social-Cognitive Development in Early Childhood

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Topic

Social cognition

Introduction

Social cognition has to do with thoughts and beliefs about the social world. The topic encompasses beliefs about others, the self, and people in general, about specific aspects of people (e.g., thoughts, desires, emotions), and about social groups and social institutions. The development of various forms of social-cognitive understanding is one of the most important achievements of childhood cognitive development.

Subject

Social cognition has been a central topic in child psychology since the inception of the field.¹ As was true for many topics, the dominant approach through the mid 20th century was that of Piaget.² Piaget argued that young children's thinking is characterized by egocentrism, or difficulty in separating one's own perspective from that of others. Thus preschool children often assume that others think or feel or wish exactly what they do, a basic deficit in social-cognitive understanding. Subsequent research has demonstrated that Piaget somewhat underestimated young children's perspective-taking abilities.³ Nevertheless, his work did identify a central challenge in any social-cognitive activity: separating one's own viewpoint from that of others. Indeed, in some situations even adults are prone to egocentric responses.^{4,5}

Perspective taking is just one of several headings under which social cognition has been studied. Work on metacognition, for example, examines children's understanding of mental activities – what they know, for instance, about memory, attention or language.^{6,7} Here and in general, even preschoolers show simple forms of understanding; most developments in metacognitive understanding, however, are not evident until the grade-school years.

In recent years most research on social cognition has been carried out under the heading of theory of mind.^{8,9,10} Theory of mind is broader in scope than its predecessors, encompassing understanding of the full range of mental states, as well as the antecedents and consequences of such understanding. An additional difference is the focus on young children; theory of mind began as a preschool literature, and in recent years has been extended to toddlerhood and infancy as well. The result is both a fuller and a more

positive picture of preschoolers' abilities than had been the case with the first generation of research on social cognition.

Problems

As with many topics in child psychology, work in social cognition addresses three general issues. One is the descriptive question: What develops and when does it develop? Challenges here include devising optimal assessment methods for the developments in question and identifying interrelations among different forms of understanding.^{11,12} A second question is why these developments occur. What are the causal forces that shape children's social-cognitive understanding? A final question concerns the effects of advances in social cognition. How, in particular, do children's social interactions change as their social-cognitive abilities mature?

Research Context

Although naturalistic data play some role,¹³ most of what we know about social-cognitive development comes from a wide variety of ingenious experimental measures. One example – and by far the most often studied example – is the false belief task.¹⁴ The false belief task tests a basic component in the understanding of belief: the realization that beliefs are mental representations and not direct reflections of reality, and as such may be false. Other tasks test other forms of epistemic understanding, for example, the ability to separate appearance from reality¹⁵ or the knowledge of how evidence leads to belief.¹⁶ Still other tasks are directed to other mental states, for example, the realization that different people may have different desires,¹⁷ or understanding of the relation between desire satisfaction and subsequent emotion.¹⁸

Recent Research Results

In a general sense, research on theory of mind is reminiscent of the earlier Piagetian literature, in that it often surprises us with respect to what children do not yet know. Thus prior to age 4 most children find it difficult to understand that beliefs can be false, either the beliefs of others or their own beliefs.¹¹ They show a myriad of other misconceptions and confusions as well, including difficulty in separating appearance and reality¹⁵ and problems in tracking the relation between experience and belief formation.¹⁹ On the other hand – and in contrast to the Piagetian literature – the difficulties are not long-lasting, for many basic developments, including understanding of false belief, emerge by age 4 or 5. For so-called nonepistemic states, such as pretense or desire, basic forms of understanding emerge even earlier, in some instances by age 2. The result is a valuable corrective to the earlier literature on social cognition, which had characterized the preschool period primarily in negative terms. Finally, recent research has not only documented a wide range of early appearing social-cognitive achievements but also provided evidence of the effects of such developments, in that it demonstrates consistent relations between social-cognitive understanding and the quality of children's social interactions.^{20,21}

Research Gaps

As is true in many areas of child psychology, we know more about what develops in social cognition than we know about how it develops. All theories agree that both social

experience and biological maturation must play a role; theories differ, however, in the relative role accorded to these factors, in exactly how they are posited to operate, and in the form that the underlying knowledge system is assumed to take.^{9,22} Research to date does not provide a basis for deciding among these possibilities.

Conclusions

The study of social cognition, one of the venerable topics in child psychology, has been reenergized by the work on theory of mind. This work has identified a wide range of social-cognitive achievements that emerge in the first 4 or 5 years of life. It has also provided preliminary answers to two questions that are the subject of ongoing research: What are the origins and what are the consequences of social-cognitive understanding?

Implications

Social cognition – especially as studied under the theory-of-mind heading – is primarily a normative topic, in that it concerns basic developments that virtually every child eventually masters. Exceptions occur in certain clinical syndromes, most notably autism; indeed, the theory-of-mind approach has been central to our understanding of the difficulties faced by people with autism.²³ In typical development, however, social cognition is not something that requires explicit adult tuition. Still, this does not mean that there is no role for parents or teachers. Various kinds of social experience can hasten the onset of social-cognitive abilities, including certain forms of parental child rearing.^{24,25} Recent research also indicates that social-cognitive skills are at least somewhat trainable; instruction in the relevant language may be especially beneficial.^{26,27} Beyond simply speeding up development, adults can affect the content of children's social-cognitive beliefs. All children, for example, form self-conceptions or beliefs about the self, but some children's self-conception are more positive and development-enhancing than those of others.²⁸ Social-cognitive abilities can be used not only for positive purposes (e.g., empathy, communication) but also for maleficent ones such as teasing or bullying.^{29,30} The clearest pragmatic implication of work on social cognition has long been evident: Interventions that alter children's social-cognitive beliefs in a positive direction can have a beneficial impact on their social behaviour and social acceptance.³¹

REFERENCES

1. Harris PL. Social cognition. In: Kuhn D, Siegler RS, eds. *Cognition, perception, and language*. 6th ed. New York, NY: Wiley; 2006: 811-858. Damon W, Lerner RM, eds. *Handbook of child psychology*; vol. 2.
2. Piaget J. *The language and thought of the child*. New York, NY: Harcourt Brace; 1926.
3. Flavell JH. Perspectives on perspective taking. In: Beilin H, Pufall P, eds. *Piaget's theory: Prospects and possibilities*. Hillsdale, NJ: Erlbaum; 1992: 107-139.

4. Birch S, Bloom P. Understanding children's and adults' limitations in mental state reasoning. *Trends in Cognitive Science* 2004;8(6):255-258.
5. Keysar B, Lin S, Barr DJ. Limits on theory of mind use in adults. *Cognition* 2003;89(1):29-41
6. Flavell JH, Miller PH, Miller SA. *Cognitive development*. 4th ed. Upper Saddle River, NJ: Prentice Hall; 2002.
7. Kuhn D. Metacognitive development. *Current Directions in Psychological Science* 2000;9(5):178-181.
8. Carpendale J, Lewis C. *How children develop social understanding*. Malden, MA: Blackwell Publishing; 2006.
9. Doherty M. *Theory of mind*. Philadelphia, PA: Psychology Press; 2009.
10. Moore C. *The Development of commonsense psychology*. Mahwah, NJ: Erlbaum; 2006.
11. Wellman HM, Cross D, Watson J. Meta-analysis of theory-of-mind development: The truth about false belief. *Child Development* 2001;72(3):655-684.
12. Wellman HM., Liu D. Scaling of theory-of-mind tasks. *Child Development* 2004;75(2):523-541.
13. Bartsch K, Wellman HM. *Children talk about the mind*. New York, NY: Oxford University Press; 1989.
14. Wimmer H, Perner J. Beliefs about beliefs: Representation and constraining function of wrong beliefs in young children's understanding of deception. *Cognition* 1983;13(1):103-128.
15. Flavell JH, Flavell ER, Green FL. Development of the appearance-reality distinction. *Cognitive Psychology* 1983;15(1):95-120.
16. Miller SA, Hardin CA, Montgomery DE. Young children's understanding of the conditions for knowledge acquisition. *Journal of Cognition and Development* 2003;4(3):325-356.
17. Repacholi BM, Gopnik A. Early reasoning about desires: Evidence from 14- and 18-month-olds. *Developmental Psychology* 1997;33(1):12-21.
18. Wellman HM, Woolley J. From simple desires to ordinary beliefs: The early development of everyday psychology. *Cognition* 1990;35(3):245-275.
19. O'Neill DK, Chong SCF. Preschool children's difficulty understanding the types of information obtained through the five senses. *Child Development* 2001;72(3):803-815.
20. Astington JW. Sometimes necessary, never sufficient: False belief-understanding and social competence. In: Repacholi B, Slaughter V, eds. *Individual Differences in Theory of Mind*. New York, NY: Psychology Press; 2003: 13-38.
21. Hughes C, Leekam S. What are the links between theory of mind and social relations? Review, reflections and new directions for studies of typical and atypical development. *Social Development* 2004;13(4):590-619.
22. Carruthers P, Smith PK, eds. *Theories of theory of mind*. Cambridge, UK: Cambridge University Press; 1996.
23. Baron-Cohen S. *Mindblindness: An essay on autism and theory of mind*. Cambridge, MA: MIT Press/Bradford Book; 1995.
24. Pears KC, Moses LJ. Demographics, parenting, and theory of mind in preschool children. *Social Development* 2003;12(1):1-19.

25. Ruffman T, Perner J, Parkin L. How parenting style affects false belief understanding. *Social Development* 1999;8(3):395-411.
26. Hale CM, Tager-Flusberg H. The influence of language on theory of mind: A training study. *Developmental Science* 2003;6(3):346-359.
27. Lohmann H, Tomasello M. The role of language in the development of false belief understanding: A training study. *Child Development* 2003;74(4):1130-1144.
28. Harter S. The self. In: Eisenberg N, ed. *Social, emotional, and personality development*. 6th ed. New York, NY: Wiley; 2006: 505-570. Damon W, Lerner RM, eds. *Handbook of child psychology*; vol 3.
29. Repacholi B, Slaughter V, Pritchard M, Gibbs V. Theory of mind, machiavellianism, and social functioning in childhood. In: Repacholi B, Slaughter V, eds. *Individual differences in theory of mind*. New York, NY: Psychology Press; 2003: 67-97.
30. Sutton J. Tom goes to school: Social cognition and social values in bullying. In: Repacholi B, Slaughter V, eds. *Individual differences in theory of mind*. New York, NY: Psychology Press; 2003: 99-120.
31. Ladd GW, Buhs ES, Troop W. Children's interpersonal skills and relationships in school settings: Adaptive significance and implications for school-based prevention and intervention programs. In: Smith PK, Hart, CH, eds. *Blackwell handbook of childhood social development*. Malden, MA: Blackwell Publishers; 2002: 394-416.

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