

## SOCIAL COGNITION

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# Early Social Cognition: Comments on Astington and Edward, Miller, Moore and Sommerville

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### Introduction

Astington and Edward,<sup>1</sup> Miller,<sup>2</sup> Moore,<sup>3</sup> and Sommerville<sup>4</sup> have provided excellent reviews of the development of social cognition in the early years. As noted across these contributions, early manifestations of social cognition include an understanding of intentionality, goals and motives, the ability to label others' emotions, the development of theory of mind (ToM), and other abilities that reflect the capacity to interpret one's own and other people's internal experiential and mental states. These authors also raised a number of pressing research questions such as the following: How do children acquire socio-cognitive knowledge? How do biological and environmental factors jointly contribute to the development of social cognition? What are the social consequences of changes in socio-cognitive skills? These authors briefly reviewed some of the literature relevant to these issues, but there is still much to learn.

### Subject

Perhaps the primary reason for studying the development of social cognition is that it is believed to affect the quality of children's social interactions. This issue is more complex than just examining if there is an association between level of social cognition and quality of social behaviour; additional, more nuanced questions can be raised. For example, many of the sociocognitive skills that young children develop emerge over a relatively brief span of time (e.g., a couple of years). For instance, there is generally considerable individual variation in children's level of ToM at age three or even four, but by age six, variation is limited on the typical ToM tasks because most children have achieved an understanding. An important question, then, is: Do individual differences in a given sociocognitive skill (e.g., ToM) during the period that it emerges relate not only to concurrent indices of social functioning, but also to subsequent individual differences in the quality of social functioning after most children have achieved a given skill? Or is variation in regard to an early sociocognitive skill primarily predictive of quality of social functioning concurrently and up to the point that acquisition of the given skill is normative?

## **Research and Conclusions**

Eggum et al.<sup>5</sup> found a pattern of data consistent with the view that early sociocognitive skills predict high-quality social functioning across time whereas the same sociocognitive skills were not predictive when assessed after an age at which many children achieve a high level of the given skill. They assessed ToM at 54 and 72 months of age, as well as children's prosocial behaviour and sympathy. ToM scores at 54 months, but not 72 months, were related to concurrent and future adult-reported prosociality and sympathy. Similarly, a measure of children's ability to label others' emotions (e.g., sadness, fear, anger, happiness) at 30 months was a somewhat better predictor of prosocial responding in subsequent years than their understanding of emotions at an older age. These findings suggest that sociocognitive skills are most predictive of the quality of social interactions – both concurrent and in the future – if measured at the age when the given skill is rapidly emerging, and that early social cognition can predict the quality of children's social functioning across time.<sup>6</sup>

If individual differences in a sociocognitive skill are found to reliably predict quality of social behaviour at an older age when most typically developing children have achieved the given skill (so the given skill at the older age is unlikely to account for variation in social functioning), there are at least two explanations for the relation. First, relatively stable biological/genetic and environmental (e.g., parenting) factors may affect not only the emergence of more rudimentary sociocognitive skills, but also the development of other, later developing sociocognitive skills,

which in turn influence children's social behaviour at the older age. Alternatively, or in addition, it is possible that children who are initially advanced in their sociocognitive abilities develop superior social skills and patterns of social interaction at a young age, and these social assets set into motion a trajectory or cascade of positive interactions with others that contribute to the development of subsequent, more mature social/interactional skills (regardless of whether the child continues to possess superior social cognition). More information on the processes underlying relations between early social cognition and later social behaviour is sorely needed.

Another important question is which sociocognitive skills are related to what aspects of social interactions. As noted by Miller<sup>2</sup> and Eisenberg,<sup>7</sup> individuals can have relatively sophisticated social cognitive skills but use such skills to harm others. Whether an individual uses the information acquired through social cognitive processes to assist, manipulate or harm others probably depends on the actor's values and own needs, and if the given social cognitive skill is likely to activate empathy and especially sympathy.<sup>7,8</sup>

For example, most ToM tasks assess only the understanding that others have different information or wants than the self, rather than an understanding that people have different feelings (although the latter may be correlated with the skills assessed by typical ToM tasks). Such information does not have a direct tie to the quality of an individual's social behaviour except for reducing the probability of a person misreading situations and, consequently, engaging in inappropriate behaviour. It seems unlikely that an understanding that other people possess different information based on their own unique experiences with objects is, for example, substantially related to the tendency to experience sympathy or empathy for others, and hence, to engage in prosocial behaviour.<sup>9</sup> In contrast, the ability to label emotions, to comprehend that contexts often elicit specific emotions from people even if they do not exhibit the emotion, and to understand how emotions affect behaviour may be more likely to predict cooperative, prosocial actions. Consistent with this view, Eisenberg et al.<sup>8</sup> found that adolescents' cognitive perspective taking was not directly related to their prosocial behaviour; it was related to prosocial behaviour only to the degree that it was related to youths' moral reasoning and sympathy (i.e., moral reasoning and sympathy fully mediated relations of cognitive perspective taking to prosocial behaviour). Moreover, there is some evidence that an understanding of others' affect is more consistently related to prosocial behaviour than an understanding of others' cognitions.<sup>6</sup> Thus, some sociocognitive skills may be more likely than others to predict specific aspects of social behaviour. Important questions for the future are which social cognitive skills are most likely to

contribute to positive versus negative social interactions and do such associations change with age?

Even if investigators find consistent relations between the development of social cognitive skills and a given aspect of social functioning, one cannot, of course, assume causality. It is quite possible that quality social interactions stimulate the development of social cognition; this idea is consistent with the research discussed in some entries on the relation between quality of parenting interactions and the development of children's social cognition. In addition, a variety of third variables likely affect both the level of children's social cognition and the quality of their social interactions. Two such variables may be the quality of parenting and language development.<sup>6</sup> Another could be demographic risks (e.g., poverty) that can produce stress, reduced learning opportunities, and health problems, all of which could affect cognition and behaviour. A fourth variable is children's self-regulatory skills and executive functioning. For example, children who are low in the ability to inhibit thoughts and behaviour tend to be low in both understanding theory of mind<sup>10</sup> and social competence.<sup>9,11</sup> To further complicate matters, self-regulatory/executive functioning skills are associated with quality of parenting and biological/genetic factors,<sup>12</sup> so it is difficult to sort out the unique influence of these different variables on each other, as well as on the association between sociocognitive and social functioning.

A final issue mentioned by Astington and Edwards<sup>1</sup> as well as Sommerville<sup>4</sup> is the need to consider culture when examining the development and correlates of social cognitive skills. As discussed by Lillard,<sup>13</sup> cultures appear to vary in their conceptions of the function of the mind and in the need to explain behaviour and internal states. Therefore, cultures likely differentially encourage attempts to understand others' mental states. In cultures that do not encourage these skills, in comparison to those that do, the development of social cognitive skills may be slower and related to fewer (or different) aspects of competent social interaction. More attention to cultural (as well as familial) influences on the early development of, and individual differences in, social cognitive skills is needed to more fully understand these issues.

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