

## SOCIAL COGNITION

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# Social Cognition: Comments on Hughes and Lecce

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### Introduction

In their article, Hughes and Lecce<sup>1</sup> focus on children's early social cognition, which includes theory of mind (i.e., the understanding that a child's thoughts and feelings may differ from those around him/her), emotion understanding and social competence. The article also adds to research in this area by emphasizing policy and intervention. The authors review research demonstrating that poor social cognition has been associated with several childhood impairments and disorders, such as autism, language impairment and conduct disorder. This research has also spawned the development of many programs that target social and emotional skills. Children's social cognition develops primarily during the preschool years and helps lay the foundation for later academic success, making this time period critical for intervention development and implementation.

### Research and Conclusions

Hughes and Lecce<sup>1</sup> outline key issues for policymakers in the field of social cognition, including: identifying developmental milestones and predictors of children's outcomes and developing effective interventions. Research in social cognition is quite timely given its relevance for both practitioners and educators. As Hughes and Lecce<sup>1</sup> note, there are stable individual differences in

social cognition, but social cognition is subject to developmental change. Whereas infants demonstrate social comprehension skills implicitly, preschool-aged children's skills are more explicit.<sup>2,3</sup> Moreover, preschoolers' social skills are predicted by early theory of mind skills.<sup>3</sup> In other words, children's ability to get along with others depends on being able to take another perspective other than their own. For example, being able to share requires that a child understand that another child might want to play with the same red truck that he/she is playing with.

Hughes and Lecce<sup>1</sup> also discuss important factors associated with social cognition, such as child and family factors. As the authors indicate, individual differences in social cognition are important in the context of intervention, and influenced by child and family factors.<sup>4-6</sup> One child factor mentioned by the authors is the ability to control impulses and plan, which are aspects of children's early executive function. Executive function helps children flexibly manage their thoughts, feelings and behaviour, and is an important predictor of social cognition. For example, being able to control behaviour and manage emotions are key for taking another person's perspective and getting along with others. In addition, as noted by Hughes and Lecce,<sup>1</sup> gender differences in social cognition are an essential focus, with research showing that girls have stronger language ability and executive function, both of which are related to social cognition.

Importantly, along with social cognition, executive function is also related to family factors such as parenting.<sup>7</sup> For example, parents who appropriately guide their children during activities are more likely to have children who can control impulses, manage emotions and develop strong social cognition, whereas children with poor self-control are more vulnerable to family instability and chaos.<sup>7</sup> In addition, maternal behaviours such as sensitivity and autonomy support help develop social cognition and executive functions. A recent study found that maternal sensitivity, mind-mindedness and autonomy support were associated with executive functioning in young children, with autonomy support being the strongest predictor.<sup>8</sup> In other words, parents who provide opportunities for children to be independent are likely to have strong executive function skills, which are also important for social cognition.

In addition to the research reviewed by Hughes and Lecce,<sup>1</sup> future areas of inquiry can focus on identifying specific pathways leading to strong social cognition in children. For example, although research has documented a strong link between children's social cognition and language development,<sup>3</sup> relations among social cognition, executive function, and outcomes such as children's academic achievement are less clear. Recent research, however, has started

elucidating some of these pathways. For example, Blair and Razza<sup>9</sup> reported that how well children understood that reality could be perceived in different ways (one aspect of social cognition), predicted early academic achievement in addition to executive function skills. Some research has also started to specify the complexity in these relations. In one study, children's emotion knowledge (also an aspect of social cognition) predicted their academic competence, including math and literacy skills and motivation.<sup>10</sup> In addition, children's language skills predicted their emotion knowledge, which then predicted academic competence. In other words, children who can communicate effectively with others are more likely to manage their emotions appropriately, which in turn, predicts stronger academic competence. Moreover, as noted by Hughes and Lecce,<sup>1</sup> children with strong social cognition are better able to direct their attention and behaviour to learning tasks and succeed academically.<sup>9</sup> In order to develop effective interventions, however, more research is needed that identifies the specific pathways for predicting strong social cognition in young children.

Research that focuses on key mechanisms and complex relations is especially important because intervention effectiveness often differs based on the factors identified by Hughes and Lecce.<sup>1</sup> These include the target population; the length of intervention, and whether subsequent booster programs are available. Interventions also differ in their effectiveness for different groups of children. For example, a growing body of research shows that children growing up in the context of risk are more likely to struggle with social cognition and executive function skills.<sup>11</sup> However, strong social cognition and executive function can also play a compensatory role for at-risk children.<sup>12</sup> In general, our suggestions echo those of Hughes and Lecce<sup>1</sup> and also highlight the importance of specifying pathways of influence for different outcomes.

### **Implications for Development and Policy**

The research findings reviewed by Hughes and Lecce<sup>1</sup> have implications for families, service providers and policy makers. For families, positive interactions and quality home learning environments promote strong social cognition. For example, parents who demonstrate appropriate social and emotional skills through conversation and interaction with their child support the development of social cognition.<sup>13</sup> Social cognition is also strengthened through peer interactions, although these relationships are both complex and transactional. For example, children with strong social cognition tend to have more positive peer relationships, and positive peer interactions lead to strong social cognition. Parents can foster positive peer relations by teaching and helping their child practice appropriate social behaviours.

For direct service providers, research can be used to develop and improve the effectiveness of intervention for young children. Hughes and Lecce<sup>1</sup> indicate that varying levels of social cognition can be observed in the classroom and that service providers need to be able to identify children with poor social cognition in order to support them in classroom settings. Service providers can also use research on specific pathways of influence to develop and improve interventions. For example, research suggests that children with difficulty communicating may also have poor executive function and social cognition skills which could negatively impact academic achievement and school success.<sup>3,9</sup> Thus, in addition to following Hughes and Lecce's<sup>1</sup> recommendations, providers who develop interventions to improve school achievement may want to include these factors.

Hughes and Lecce<sup>1</sup> also provide several recommendations for policy makers, including multi-faceted family and educational initiatives, as well as policies geared toward clinicians. The complexity of the relations between social cognition and children's outcomes also deserves consideration for policy development. For example, interventions could be especially beneficial to certain groups of children (e.g., children exposed to cumulative risk such as low socio-economic status, single parent households and family chaos). Moreover, strong social cognition can be a protective factor for at-risk children. Intervention programs and policies are likely to be most effective when researchers, service providers, practitioners and policy makers, work together to foster healthy development in young children.

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