ENCYCLOPEDIA
on Early Childhood
Development

Early Social Cognition

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Introduction

Most definitions of social cognition in early childhood center on children's awareness of their own and others' thoughts, feelings, beliefs and intentions (aka "theory of mind") but from a policy angle at least, both competence and performance perspectives are important. Thus, while some interventions improve children's social understanding, others focus on applying this understanding to promote relationship skills (e.g., via good emotion regulation or positive strategies for avoiding or resolving conflict).

Subject

Social cognition has broad clinical and educational relevance. Although early work suggested that deficits were restricted to children with autism,[1] impairments have since been identified in several groups of children, including those with specific language impairment[2] or conduct disorder,[3] or late-signing deaf children.[4] More broadly, programmes to promote social and emotional learning are available across the globe, often supported by the Collaborative for Academic, Social and Emotional Learning (CASEL).[5]

Problems

For the policymaker, key issues in this field concern the importance of:

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1. charting key developmental milestones in social cognition;
2. identifying outcomes associated with individual differences in social cognition;
3. elucidating the origins of these individual differences;
4. devising multi-pronged interventions for schools, families and communities.

Research Context

Early studies of social cognition relied on children's responses to forced-choice questions about story characters (e.g., does he feel happy or sad). More recent research involves an array of methods that include asking open-ended questions (e.g., why does he feel that way?), direct observations (e.g., play between friends or siblings, or parent-child shared reading), open-ended child interviews and non-verbal paradigms for infants. Each has different strengths and weaknesses, such that multi-method studies are recommended.

Key Research Questions

Four research questions follow from the key problems outlined above.

1. What are the developmental milestones in social cognition?
2. How stable and meaningful are individual differences in social cognition?
3. What predicts individual differences in social cognition?
4. What kinds of interventions are effective?

Recent Research Results

With regard to development, recent findings highlight both continuity and change: infants show much more social awareness than previously thought, but this awareness is implicit and intuitive, rather than explicit and reflective.[6] Thus school-based interventions (e.g., PATHS[7]) often focus on ways of helping children to reflect on what they already know implicitly about other people's thoughts and feelings.

Theory-of-mind skills at age 3½ predict unique variance at age 6 in children's theory-of-mind skills and in their talk to friends about thoughts and feelings – even controlling for effects of language ability at both time-points.[8] Preschool theory-of-mind skills have also been found to predict academic success up to four years later.[9-11]

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In turn, preschool individual differences are predicted by child factors, such as impulse control, planning and language abilities,[12] and family factors, such as secure attachment relationships with caregivers, family talk about thoughts and feelings and the presence of siblings.[13] The sibling effect is especially striking because it runs counter to the advantage shown by first-born or only children on general cognitive outcomes.[14] Possible explanations include the increased opportunities siblings provide for pretend play, for teasing, provocation and engaging in (and eavesdropping on) family conversations about differences in points of view.

These findings highlight the importance of helping parents to form close relationships with their children from infancy, to build up the skills needed to foster their children's awareness of thoughts and feelings and to provide regular opportunities for their children to play with other children. Although effective internet-based programs have been developed,[15] family-based interventions are not yet widely available and remain poorly evaluated. One exception, the Play and Learning Strategies intervention (PALS), highlights the need for sustained support from infancy to preschool. Specifically, while the infancy phase of PALS greatly increased maternal warmth, only a double-dosed intervention (delivered across infancy and toddlerhood/early preschool) increased maternal cognitive responsiveness.[16]

School-based interventions to promote social and emotional learning take a variety of forms, including team sports (to encourage cooperation with peers), cross-age mentoring, and pairing children up to practice reflective listening. Interventions also differ in terms of whom they are aimed at: many seek to improve all children's opportunities for social and emotional learning (and so involve the whole school community) but some are targeted at particularly vulnerable/problematic cases (and often can only produce positive changes through close partnership with families). A recent meta-analysis[17] of school-based interventions has revealed clear benefits in three broad areas: children's feelings, adjustment and achievement.

However, a closer look suggests a more complex picture. First, echoing findings from family-based interventions, reviews for the UK's National Institute for Clinical Excellence (NICE) highlight the need to supplement preschool interventions with later booster programmes.[18] Second, the processes linking understanding to behaviour (or competence to performance) differ for distinct groups of children. For example, among children who bully, only those who are also victims of bullying show deficits in social cognition.[19] Conversely, high empathy scores predict the likelihood of defending victims of bullying, but only among popular children.[20] Similarly, research on "Machiavellian" children[21,22] highlights the importance of distinguishing between

children's ability to understand others, and how children apply this understanding in their everyday social lives.

Research Gaps

Longitudinal studies remain remarkably scarce, and this gap significantly constrains conclusions about underlying processes. Another research gap concerns gender as a useful lens for examining links between competence and performance, as gender differences are particularly clear for social behaviour rather than social cognition.[23] With regards to families, while negative effects of maternal depression on young children's behaviour are well established,[24] researchers have yet to assess whether social cognition plays a mediating role in these effects. Finally, much more work is needed to elucidate the key elements of successful interventions.

Conclusions

These results support four policy-oriented conclusions. Specifically, social cognition:

1. begins early in life, with progress from infancy to school-age reflecting a shift from intuitive to reflective understanding;
2. predicts both academic and social success, although these predictive relationships depend on interpersonal factors (e.g., peer status);
3. varies according to both child factors (e.g., language, executive functions) and family factors (e.g., responsive parenting, sibling relationships);
4. can be improved through interventions, but these should be multi-pronged, sustained and if possible tailored to suit children with different cognitive and social profiles.

Implications for Parents, Services and Policy

Families: Two simple means of promoting family discourse about thoughts and feelings are engaging children in: (i) conversations about shared experiences/future activities; and (ii) shared reading of picture books. Children with proficient executive functions (e.g., good planning skills, self-control, cognitive flexibility) also show superior social cognition and variation in executive function is related to both positive (e.g., parental scaffolding of goal-directed activities) and negative (e.g., inconsistent parenting and family chaos) aspects of family life.[25] Sibling interactions are also important: because of their shared humour/interests, siblings are often

wonderful partners for joint pretend play, while sibling disputes provide opportunities to reconcile differences in points of view.

Service providers: Children with poor social cognition are at raised risk of: (i) entering into coercive cycles of violence in response to harsh parenting;[26] (ii) difficulties making the transition to school[13] and (iii) displaying pragmatic difficulties that get misread as “conduct problems”, such as “insolence” towards teachers.[27,28] Conversely, although children with good socio-cognitive skills typically do well, they may show increased sensitivity to teacher criticism[29] or apply their social understanding to deviant goals (e.g., becoming “ringleader bullies”[30]). Interventions therefore require a dual focus to ensure that improvements in social cognition lead to improved self-esteem and peer success.

Policy makers: Family policies that foster close and supportive parent-infant relationships (e.g., generous maternity/paternity leave, support for parents experiencing postnatal depression) are important, but need to be supplemented by interventions in the toddler to preschool years. Educational initiatives that foster social and emotional learning are promising, but should extend beyond child factors to consider children’s social environments (e.g., popularity with peers, or peer victimization). Finally, policies are needed to improve clinicians’ awareness that children with specific language impairments or conduct problems (as well as children on the autism spectrum) often show difficulties in social cognition.

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