ENCYCLOPEDIA
on Early Childhood
Development



Peer relations

Last update: September 2024
Topic Editor:
Michel Boivin, PhD, Université Laval, Canada

©2004-2026 ABILIO | PEER RELATIONS

Table of content

Synthesis 5

The Origin of Peer Relationship Difficulties in Early Childhood and their role in Children's Psychosocial Adjustment and Development 9
MICHEL BOIVIN, PHD, CANADA CHAIR ON CHILDREN'S SOCIAL DEVELOPMENT & LYSANDRE PROVOST, PHD STUDENT, SEPTEMBER 2024

Early Peer Relations and their Impact on Children's Development 20
DALE F. HAY, PHD, MARCH 2005

Sibling Relations and Their Impact on Children's Development 25
NINA HOWE, PHD, HOLLY RECCHIA, PHD, CHRISTINE KINSLEY, MA, MARCH 2023

Prevention and Intervention Programs Promoting Positive Peer Relations in Early Childhood 45
[1]CARLA KALVIN, PHD, [2]KAREN L. BIERMAN, PHD, [3]STEPHEN A. ERATH, PHD, MAY 2023

Early Interventions to Improve Peer Relations/Social Competence of Low-Income Children 52
PATRICIA H. MANZ, PHD, CHRISTINE M. MCWAYNE, PHD, NOVEMBER 2004

Peer-related Social Competence for Young Children with Disabilities 58
SAMUEL L. ODOM, PHD, JANUARY 2005

Promoting Young Children's Peer Relations: Comments on Odom, Manz and McWayne, and Bierman and Erath 64
MICHAEL J. GURALNICK, PHD, JANUARY 2005

©2004-2026 ABILIO | PEER RELATIONS

Social Skills Intervention and Peer Relationship Difficulties in Early Childhood: Comments on Bierman and Erath, Manz and McWayne, and Odom 68
JACQUELYN MIZE, PHD, JULY 2005

Topic funded by:



©2004-2026 ABILIO | PEER RELATIONS

Synthesis

How important is it?

Peer relationships in early childhood are essential to concurrent and future psychosocial adjustment. Experienced through group activities or one-on-one friendships, they play an important role in children's development, helping them to master new social skills and become acquainted with the social norms and processes involved in interpersonal relationships. This topic is of particular interest nowadays since a growing number of children are exposed to peers even before school age through daycare, and because most children interact with siblings who are about their age in the family context.

By age four at the latest, most children are able to have best friends and know which peers they like or dislike. However, between 5% and 10% of children experience chronic peer relationship difficulties, such as rejection and harassment. Early problems with peers can have a negative impact on the child's later social and emotional development. Nevertheless, interventions targeting such difficulties seem to be especially effective when they are undertaken early in life.

What do we know?

There are a number of emotional, cognitive and behavioural skills developed in the first two years of life that help promote positive peer relations. These include managing joint attention, regulating emotions, inhibiting impulses, imitating another child's actions, understanding cause-and-effect relationships, and developing language skills. Some external factors, such as children's relationships with family members and their cultural or socioeconomic background, and individual factors, such as physical, intellectual, developmental or behavioural disabilities, may also influence young children's peer experiences.

Origins of peer relationship difficulties

Children with disabilities, who are often impaired in several of the above-mentioned basic skills, tend to perform less well socially than their typically developing peers. In particular, children with very limited or no communication skills, limited social skills and/or limited motor skills tend to have inadequate (e.g. aggressive) behaviours, to interact less with peers, and as a result to be

less well accepted by their peers.

Even in children who display no disabilities, one of the chief factors associated with peer relationship difficulties is behaviour. Children who are aggressive, hyperactive or withdrawn often face greater peer rejection.

The relationship between aggressive behaviour and the experience of peer rejection may vary according to gender, developmental period and peer group. For example, the aggression-rejection association is more marked in preschool or early school years than later in childhood. Aggressive children may also be more popular when they belong to a group of children who are supportive or neutral towards aggressive behaviours, and may not appear to have difficulties making friends among similarly aggressive friends.

Still, the absence of prosocial behaviour, rather than the presence of aggression, may promote peer rejection. Shy and withdrawn children also experience peer relationship difficulties, although these are more likely to occur later than the preschool years.

Impact of peer relationship difficulties

Over the short and medium term, problematic peer relations are associated with educational underachievement and low academic performance. Among other things, peer conflict and rejection can suppress children's motivation for classroom activities. Children who have friends in the classroom and who are accepted by their peers are generally more motivated to participate.

Over the long term, early peer relationship difficulties are correlated with a variety of adjustment problems in adolescence and young adulthood, such as school dropout, delinquency and emotional problems, such as loneliness, depression and anxiety. Yet the evidence for long-term consequences of peer difficulties experienced in the preschool years is limited, as other potential causes (e.g. personal or environmental factors) have not been ruled out. However, risks of maladjustment in children with early behavioural and emotional problems appear to be exacerbated by peer rejection. Conversely, early friendships and positive relations with the peer group appear to protect at-risk children against later psychological problems.

Sibling relationships are a special kind of peer relationship, more intimate and likely to last longer than any other relationship in one's lifetime. They provide an important context for the

development of children's understanding of others' worlds, emotions, thoughts, intentions and beliefs. Frequent sibling conflicts during childhood are associated with poor adjustment later in life, including violent tendencies.

What can be done?

Prevention programs

Two kinds of prevention programs designed to promote the social and emotional competencies of preschool children have shown positive impacts: universal programs, which are usually teacher-taught and directed toward the entire classroom to promote social learning and positive peer relations; and indicated programs, which focus on remediating skill deficits and reducing existing behavioural problems that may lead to peer difficulties in some children.

Research suggests that implementing both universal and indicated programs in the same setting would provide an optimal continuum of services. Universal programs could also enhance the effectiveness of indicated programs by making the classroom environment more receptive and supportive of the emerging social skills of children who are the target of indicated programs. Nevertheless, the costs and benefits of implementing universal programs must be analyzed.

All preschoolers should be taught a range of skills that are associated with peer acceptance and that protect against peer rejection. In the preschool years, these include cooperative play skills, language and communication skills, emotional understanding and regulation, aggression control and social problem-solving skills. Universal programs have been designed to teach these skills, and it appears that preschool curricula that use skill presentation lessons (with modelling stories, puppets and pictures) and guided practice activities (role plays and games) to teach social-emotional skills in the classroom have positive impacts.

Key ingredients of effective indicated programs include coaching young children in cooperative play and communication skills, and providing generalization activities in the classroom context. These programs have proven to be effective for children with low peer acceptance or social-behavioural problems and developmental disabilities.

To promote positive peer experiences specifically in children with disabilities, inclusive programs taking place in a group of well-adapted children should be the educational placement of choice. In fact, disabled children often require systematic and individually planned interventions or

teaching strategies to promote peer-related social competence, and a key feature that determines the success of these interventions is access to a socially competent group.

Children from low socioeconomic backgrounds or ethnic minorities also represent at-risk populations for peer difficulties. In the preschool years, peer play is a natural and dynamic context for bolstering the acquisition of important social competencies in these children, and interventions that are interwoven within this context have emerged as the most effective means for improving the peer interactions of these children. Developing and implementing interventions in partnership with early childhood educators and children's families enhances their relevance for children from diverse cultures and socioeconomic backgrounds.

Intervention programs addressing problematic sibling relationships are in their infancy, but recent evidence suggests that social skills training can help reduce conflict between young siblings and increase their prosocial interactions. Interventions for parents focus on training them to mediate conflicts between their children rather than adjudicate for them. By structuring the negotiation process and yet leaving the final resolution in the hands of the children themselves, this kind of intervention aims not only to improve conflict outcomes but also to help children understand each other and develop constructive ways to resolve conflicts.

Challenges

In both the United States and Canada, preschool education consists of a fragmented patchwork of programs with no national regulatory agency, organizational framework or support system. Thus, an important challenge for policy-makers is to find a way to disseminate information, provide adequate training to parents, child-care workers and teachers, make social skills curricula available to the large number of loosely connected programs serving preschool-aged children, and monitor the quality of such programs.

Furthermore, while the literature on children's peer relations offers different prospects for designing and implementing effective prevention and intervention programs, additional randomized controlled trials are needed, especially for preventive interventions with this particular age group.

The Origin of Peer Relationship Difficulties in Early Childhood and their role in Children's Psychosocial Adjustment and Development

Michel Boivin, PhD, Canada Chair on Children's Social Development & Lysandre Provost, PhD student

GRIP, École de psychologie & Université Laval, Canada

September 2024, Éd. rév.

Introduction

Peer relationships are thought to play an important role in children's development.[1–3] They offer unique opportunities for getting acquainted with the social norms and processes involved in interpersonal relationships, and for learning new social skills. They also provide contexts in which capacities for self-control may be tested and refined. Childhood peer relations are also multifaceted: children experience peer interactions through their participation in group activities, as well as through their dyadic (i.e., one-on-one) associations with friends.[2] These different facets of peer experiences provide age-related developmental opportunities for the construction of the self, with peer group experiences progressively gaining in importance and culminating in middle childhood, before giving way to friendships as the most central feature in late childhood and adolescence.[3,4]

Problems

Unfortunately, peer relationships are not always beneficial to the child: between 10% and 15% of children experience chronic peer relationship difficulties, such as peer rejection[5], as well as peer harassment and victimization.[6] In the last 40 years, there has been substantial research aimed at understanding the nature, meaning and impact of peer relation problems.[2] Most of this research effort has been centered on school-age children. Yet a growing number of children are exposed to peers early in their life through daycare.[7] Early peer relations are thus highly relevant to social policy issues and should be an object of persistent attention.

Key Research Questions

There are at least four basic questions of relevance to the study of early peer relations:

1. What are the developmental landmarks of early peer interactions and peer relationships?
2. At what age do children start experiencing peer relationship difficulties?
3. What social behaviours are responsible for early peer relationship difficulties?
4. What are the consequences of early peer relationship difficulties?

Research Results

The developmental landmarks of early peer interactions and relationships: by the end of their first year of life, most infants will share activities with peers, mainly around objects. By the end of the second year of life, with improved locomotion and the onset of language, toddlers have the ability to coordinate behaviour in games with play partners; they can imitate each other and start to alternate roles in play.[8,9] Between the ages of three and five, there is a systematic increase in prosocial behaviours and in pretend play, as well as a decrease in aggressive behaviours, reflecting the child's improved capacity to adopt the perspective of the play partner.[9,10] These emerging social interactive skills are the foundation of early peer relationships, which are first shown in the behavioural preference for specific peers.[9,11] These early preferences will gradually lead to preschool friendships that are mainly based on concrete exchanges and mutual play activities. In daycare settings, these friendships progressively become sex-segregated and embedded in affiliative networks.[1,12,13] Informal and mixed-aged play groups are also formed in the neighborhood.[2,14]

At what age do children start experiencing peer relationship difficulties? Preschoolers gradually form their perceptions about their friends and peers. At least by age four, they will reliably identify best friends, peers they like and peers they dislike. The aggregation of these perceptions reveals a coherent and consistent peer status structure within the larger group, with specific children being disliked and negatively perceived by the peer group.[5,15,16] This form of peer rejection may lead to various forms of negative behaviours toward the child, such as controlling and dominating a child, excessive teasing and general peer harassment and victimization.[17,18] Peer harassment and victimization refers to a child being exposed, repeatedly and over time, to negative treatment by one or more children, typically within a context of imbalance of power.[19] It has mostly been documented in middle childhood, but there is evidence that these difficulties exist in the preschool years.[20–23]

What factors are responsible for early peer relationship difficulties? Deviant physical attributes, such as speech problems, physical clumsiness or disability, may lead to peer relation difficulties. However, children's behaviour attributes have been more systematically identified as the main sources of these difficulties. Children who experience peer relationship difficulties tend to be more aggressive, hyperactive and oppositional, but also more socially withdrawn and less sociable.[1,24–26] These behaviours could be the proximal determinants, as well as the consequences, of their relationship difficulties in early childhood.[27] Aggressive behaviours, especially reactive aggressive behaviours, are the most commonly cited behavioural correlates and proximal determinants of peer rejection in school settings.[1,28,29] There is also substantial evidence that child genetic vulnerabilities partly account for this predictive association[30–34], which means that some children carry some biological risk for peer difficulties long before they encounter peers. However, this risk is not destiny, but rather point to the need for early intervention aimed at these vulnerabilities. Furthermore, some aggressive children may actually enjoy a fairly high social status,[35] especially if the group norms are supportive or neutral with regard to aggressive behaviours.[36] This is more likely the case among preschool children because instrumental and proactive forms of aggressive behaviours may be positively related to popularity.[37] Indeed, children of that age, especially boys,[38] often use aggressive means to reach high status in the social structure. A related phenomenon is that aggressive preschoolers also tend to proactively associate with or befriend each other,[29,39] a tendency that could reinforce aggressive behaviours as a means of reaching social goals[40,41] Finally, shy and withdrawn children are also likely to experience peer relation difficulties.[42] However, in this latter case, the relational problems are more likely to occur at a later age because these forms of social reticence are less salient and obvious to preschoolers.[24,43]

What are the consequences of early peer relationship difficulties? There is a consensus in the field of childhood peer relations that children experiencing peer relationship difficulties are at risk for a variety of future adjustment problems, including dropping out of school, delinquency and emotional problems.[29,44] However, the developmental processes leading to these later problems are still open to question: are early peer relation difficulties really causing these adjustment problems or are these problems resulting from enduring child characteristics?[1,45] Enduring peer relationship difficulties in childhood have been found to predict internalized problems such as loneliness, depression and anxiety, as well as physical health and school problems.[44–46] The evidence with preschool children is more limited, but points in the same direction.[39,47,48] However, it is not clear whether these early peer relationship problems are

causing long-term consequences. Peer rejection in kindergarten may also strengthen reactive aggressive behaviours among children initially disposed toward aggression, possibly because the experience of peer rejection induces and promotes hostile attributions and expectations about social situations.[49] As stated earlier, mutual affiliation among aggressive children may also reinforce their aggressive behaviours during early childhood. Indeed, peer interactions among aggressive children during preschool years are sometimes occasions for coercive interchanges, which may, under some conditions (e.g., child's submissiveness, adult and peer tolerance of aggression), serve as learning opportunities and provide training grounds for aggressive behaviors.[50,51] This process, labelled "deviancy training," has received substantial empirical support.[52,53] Preliminary evidence seems to indicate that time spent in daycare is associated with higher rates of aggression,[54,55] and deviancy training processes might partly be responsible for this.[50,56] Finally, it should also be noted that friendship relations (e.g., affiliation with aggressive children;[57] having a protective friend[58]) may also play an important protective role with respect to negative peer experiences and the impact of these negative experiences. These processes may also operate in preschool.

Conclusions

The social lives of preschoolers are quite elaborate and refined as they face a variety of positive and negative peer experiences throughout their early years. Individual differences in peer adjustment may be noticed as soon as peer groups are formed. At least by age four, a significant proportion of preschoolers will experience peer relationship difficulties such as peer rejection and peer harassment, and these negative experiences could have an impact on their social-emotional adjustment and development. The developmental dynamics of these difficulties are multifaceted and involve genetic vulnerabilities that are expressed early in development, as well as bi-directional and differentiated associations with preschoolers' behaviour tendencies. Among these, inappropriate social behaviours, such as aggressive behaviours are clearly involved, but in complex ways. Not only are they significant genetically influenced proximal determinants of peer relationship difficulties, but they are also embedded in an emergent social matrix that could maintain and promote aggressive tendencies. Starting in kindergarten, hostile aggressive behaviours appear associated with, and perhaps augmented by, peer rejection. However, most aggressive toddlers are not marginalized, but rather tend to associate with each other in the preschool years. This could lead to some forms of deviancy training.

Implications for Policy and Services Perspectives

It is not clear whether early positive and negative early peer relationships are causing long-term benefits or liabilities. However, given the evidence reviewed herein, it is obvious that this question should be of concern to policy-makers and service-providers. Undoubtedly, many adjustment problems can be traced back to early peer relationship problems. The challenge of the research community is to more clearly understand the origin, development and causal impact of healthy and problematic peer relationships in early childhood. Early developmental and genetically-informed prospective studies are crucial to this endeavour. These fundamental questions are all the more important because a growing number of children experience peer relations early through a variety of public and private daycare arrangements. These services also intervene earlier than ever in the lives of children. It will be important to evaluate how various daycare arrangements may or may not promote healthy peer relationships. These research efforts should also help in the design and evaluation of appropriate and efficient prevention programs. For instance, it is now clear that we should not group toddlers displaying aggressive behaviours for the purpose of treatment.

References

1. Parker JG, Rubin KH, Erath SA, Wojslawowicz JC, Buskirk AA. Peer relationships, child development, and adjustment: a developmental psychopathology perspective. In: Cicchetti D, Cohen DJ. *Developmental Psychopathology, Volume 1: Theory and method*. 2nd Edition. John Wiley & Sons, Ltd; 2015:419-493. doi:10.1002/9780470939383.ch12
2. Rubin KH, Bukowski WM, Bowker JC. Children in peer groups. In: Lerner RM, ed. *Handbook of child psychology and developmental science*. John Wiley & Sons, Ltd; 2015:1-48. doi:10.1002/9781118963418.childpsy405
3. Schwartz-Mette RA, Shankman J, Dueweke AR, Borowski S, Rose AJ. Relations of friendship experiences with depressive symptoms and loneliness in childhood and adolescence: A meta-analytic review. *Psychological Bulletin*. 2020;146(8):664-700. doi:10.1037/bul0000239
4. Furman W, Rose AJ. Friendships, romantic relationships, and peer relationships. In: Lerner RM, ed. Handbook of child psychology and developmental science. 1st ed. Wiley; 2015:1-43. doi:10.1002/9781118963418.childpsy322
5. Ettekal I, Ladd GW. Developmental pathways from childhood aggression–disruptiveness, chronic peer rejection, and deviant friendships to early-adolescent rule breaking. *Child Development*. 2015;86(2):614-631. doi:10.1111/cdev.12321

6. Oncioiu SI, Orri M, Boivin M, Geoffroy MC, Arseneault L, Brendgen M, Vitaro F, Navarro MC, Galéra C, Tremblay RE, Côté SM. Early Childhood factors associated with peer victimization trajectories from 6 to 17 years of age. *Pediatrics*. 2020;145(5):e20192654. doi:10.1542/peds.2019-2654
7. Peter FH, Schober PS, Spiess KC. Early birds in day care: the social gradient in starting day care and children's non-cognitive skills. *CESifo Economic Studies*. 2016;62(4):725-751. doi:10.1093/cesifo/ifv019
8. Harrist AW, Bakshi AJ. The interplay of parent and peer influences on children's social development. In: Smith PK, Hart CH, eds. The Wiley-Blackwell handbook of childhood social development. 3rd ed. Wiley Blackwell; 2022:459-481. Published online. doi:10.1002/9781119679028.ch25
9. Rubin KH, Bukowski WM, Parker JG, Bowker JC. Peer interactions, relationships, and groups. In: Damon W, Lerner RM, Kuhn D, eds. *Child and Adolescent Development: An Advanced Course*. Wiley; 2008:141-180.
10. Jambon M, Madigan S, Plamondon A, Jenkins J. Developmental trajectories of physical aggression and prosocial behavior in early childhood: Family antecedents and psychological correlates. *Developmental Psychology*. 2019;55(6):1211-1225. doi:10.1037/dev0000714
11. Öneren Şendil Ç, Erden FT. Peer preference: a way of evaluating social competence and behavioural well-being in early childhood. *Early Child Development and Care*. 2014;184(2):230-246. doi:10.1080/03004430.2013.778254
12. Mehta CM, Strough J. Sex segregation in friendships and normative contexts across the life span. *Developmental Review*. 2009;29(3):201-220.
13. Shutts K, Kenward B, Falk H, Ivegran A, Fawcett C. Early preschool environments and gender: Effects of gender pedagogy in Sweden. Journal of Experimental Child Psychology. 2017;162:1-17. doi:10.1016/j.jecp.2017.04.014
14. Howes C. Friendship in early childhood. In: Rubin KH, Bukowski WM, Laursen B, eds. *Handbook of peer interactions, relationships, and groups.* The Guilford Press; 2009:180-194.
15. Beazidou E, Botsoglou K. Peer acceptance and friendship in early childhood: the conceptual distinctions between them. *Early Child Development and Care*. 2016;186(10):1615-1631.

doi:10.1080/03004430.2015.1117077

16. Weyns T, Colpin H, Engels MC, Doumen S, Verschueren K. The relative contribution of peer acceptance and individual and class-level teacher–child interactions to kindergartners' behavioral development. *Early Childhood Research Quarterly.* 2019;47:259-270. doi:10.1016/j.ecresq.2018.12.009
17. Kärnä A, Marinus Voeten, Elisa Poskiparta, Christina Salmivalli. Vulnerable children in varying classroom contexts: Bystanders' behaviors moderate the effects of risk factors on victimization. *Merrill-Palmer Quarterly.* 2010;56(3):261-282. doi:10.1353/mpq.0.0052
18. Godleski SA, Kamper KE, Ostrov JM, Hart EJ, Blakely-McClure SJ. Peer victimization and peer rejection during early childhood. *Journal of Clinical Child and Adolescent Psychology*. 2015;44(3):380-392. doi:10.1080/15374416.2014.940622
19. Beran T. Stability of harassment in children: analysis of the Canadian National Longitudinal Survey of Children and Youth Data. *Journal of Psychology.* 2008;142(2):131-146. doi:10.3200/JRLP.142.2.131-146
20. Kirves L, Sajaniemi N. Bullying in early educational settings. In: Määttä K, Uusiautti S. *Early Child Care and Education in Finland.* Routledge; 2014:93-110.
21. Ladd GW, Ettekal I, Kochenderfer-Ladd B. Peer victimization trajectories from kindergarten through high school: Differential pathways for children's school engagement and achievement? *Journal of Educational Psychology.* 2017;109(6):826-841. doi:10.1037/edu0000177
22. Saracho ON. Bullying prevention strategies in early childhood education. *Early Childhood Education Journal*. 2017;45(4):453-460. doi:10.1007/s10643-016-0793-y
23. Barker ED, Boivin M, Brendgen M, et al. Predictive validity and early predictors of peer-victimization trajectories in preschool. *Archives of General Psychiatry.* 2008;65(10):1185-1192.
24. Boivin M, Petitclerc A, Feng B, Barker ED. The developmental trajectories of peer victimization in middle to late childhood and the changing nature of their behavioral correlates. *Merrill-Palmer Quarterly.* 2010;56(3):231-260.
25. Hong JS, Espelage DL. A review of research on bullying and peer victimization in school: An ecological system analysis. *Aggression and Violent Behavior*. 2012;17(4):311-322. doi:10.1016/j.avb.2012.03.003

©2004-2026 ABILIO | PEER RELATIONS

26. Pouwels JL, Hanish LHD, Smeekens S, Cillessen AHN, van den Berg YHM. Predicting the development of victimization from early childhood internalizing and externalizing behavior. *Journal of Applied Developmental Psychology*. 2019;62:294-305. doi:10.1016/j.appdev.2019.02.012

27. Casper DM, Card NA. Overt and relational victimization: a meta-analytic review of their overlap and associations with social–psychological adjustment. *Child Development*. 2017;88(2):466-483. doi:10.1111/cdev.12621

28. Bierman KL, Kalvin CB, Heinrichs BS. Early childhood precursors and adolescent sequelae of grade school peer rejection and victimization. *Journal of Clinical Child and Adolescent Psychology*. 2015;44(3):367-379. doi:10.1080/15374416.2013.873983

29. Chen D, Drabick DAG, Burgers DE. A developmental perspective on peer rejection, deviant peer affiliation, and conduct problems among youth. *Child Psychiatry and Human Development*. 2015;46(6):823-838. doi:10.1007/s10578-014-0522-y

30. Armitage JM, Morneau-Vaillancourt G, Pingault JB, Andlauer TFM, Paquin S, Langevin S, Brendgen M, Dionne G, Séguin J, Rouleau G, Vitaro F, Ouellet-Morin I, Boivin M. A multi-informant and multi-polygenic approach to understanding predictors of peer victimisation in childhood and adolescence. *JCPP Advances*. 2022;2(1):e12063. doi:10.1002/jcv2.12063

31. Boivin M, Brendgen M, Vitaro F, et al. Strong genetic contribution to peer relationship difficulties at school entry: findings from a longitudinal twin study. *Child Development*. 2013;84(3):1098-1114.

32. Boivin M, Brendgen M, Vitaro F, et al. Evidence of gene–environment correlation for peer difficulties: Disruptive behaviors predict early peer relation difficulties in school through genetic effects. *Development and Psychopathology.* 2013;25(1):79-92.

33. Brendgen M, Vitaro F, Boivin M, Dionne G, Pérusse D. Examining genetic and environmental effects on reactive versus proactive aggression. Developmental Psychology. 2006;42(6):1299-1312.

34. Lacourse E, Boivin M, Brendgen M, Petitclerc A, Girard A, Vitaro F, Paquin S, Ouellet-Morin I, Dionne G, Tremblay RE. A longitudinal twin study of physical aggression during early childhood: evidence for a developmentally dynamic genome. *Psychological Medicine*. 2014;44(12):2617-2627.

©2004-2026 ABILIO | PEER RELATIONS

35. Berger C, Batanova M, Cance JD. Aggressive and prosocial? examining latent profiles of behavior, social status, machiavellianism, and empathy. *Journal of Youth and Adolescence.* 2015;44(12):2230-2244. doi:10.1007/s10964-015-0298-9

36. Salmivalli C. Bullying and the peer group: A review. *Aggression and Violent Behavior*. 2010;15(2):112-120. doi:10.1016/j.avb.2009.08.007

37. Pellegrini AD, Roseth C, Van Ryzin M, Solberg D. Popularity as a form of social dominance: An evolutionary perspective. In: Cillessen AHN, Schwartz D, Mayeux L, eds. *Popularity in the Peer System*. The Guildord Press; 2011:123-139.

38. Veiga G, O'Connor R, Neto C, Rieffe C. Rough-and-tumble play and the regulation of aggression in preschoolers. Early Child Dev Care. 2022;192(6):980-992. doi:10.1080/03004430.2020.1828396

39. Kamper-DeMarco KE, Ostrov JM. The influence of friendships on aggressive behavior in early childhood: Examining the interdependence of aggression. *Child Psychiatry and Human Development.* 2019;50(3):520-531. doi:10.1007/s10578-018-0857-x

40. Kucaba K, Monks CP. Peer relations and friendships in early childhood: The association with peer victimization. *Aggressive Behavior.* 2022;48(4):431-442. doi:10.1002/ab.22029

41. Rambaran JA, Dijkstra JK, Veenstra R. Bullying as a Group Process in Childhood: A Longitudinal Social Network Analysis. Child Development. 2020;91(4):1336-1352. doi:10.1111/cdev.13298

42. Affrunti NW, Geronimi EMC, Woodruff-Borden J. Temperament, peer victimization, and nurturing parenting in child anxiety: a moderated mediation model. *Child Psychiatry and Human Development.* 2014;45(4):483-492. doi:10.1007/s10578-013-0418-2

43. Sugimura N, Berry D, Troop-Gordon W, Rudolph KD. Early social behaviors and the trajectory of peer victimization across the school years. *Developmental Psychology*. 2017;53(8):1447-1461. doi:10.1037/dev0000346

44. Geoffroy MC, Boivin M, Arseneault L, Renaud J, Perret LC, Turecki G, Michel G, Salla J, Vitaro F, Brendgen M, Tremblay RE, Côté SM. Childhood trajectories of peer victimization and prediction of mental health outcomes in midadolescence: a longitudinal population-based study. *CMAJ*. 2018;190(2):E37-E43. doi:10.1503/cmaj.170219

45. McDougall P, Vaillancourt T. Long-term adult outcomes of peer victimization in childhood and adolescence: Pathways to adjustment and maladjustment. *American Psychologist*.

2015;70(4):300-310. doi:10.1037/a0039174

46. Rueger SY, Jenkins LN. Effects of peer victimization on psychological and academic adjustment in early adolescence. *School Psychology Quarterly*. 2014;29(1):77-88. doi:10.1037/spq0000036

47. Ladd GW, Troop-Gordon W. The role of chronic peer difficulties in the development of children's psychological adjustment problems. *Child Development*. 2003;74(5):1344-1367. doi:10.1111/1467-8624.00611

48. Memba GV, Ostrov JM. The role of peer victimization in predicting aggression and internalizing problems in early childhood: the moderating effect of emotion regulation and gender. *Early Education and Development*. 2023;34(1):53-70. doi:10.1080/10409289.2021.1997497

49. Pornari CD, Wood J. Peer and cyber aggression in secondary school students: the role of moral disengagement, hostile attribution bias, and outcome expectancies. *Aggressive Behavior.* 2010;36(2):81-94. doi:10.1002/ab.20336

50. Rodkin PC, Espelage DL, Hanish LD. A relational framework for understanding bullying: Developmental antecedents and outcomes. *American Psychologist*. 2015;70(4):311-321. doi:10.1037/a0038658

51. Salazar S, Boivin M, Vitaro F, et al. Friendships and deviancy training in young children. *Journal of Aggression, Conflict and Peace Research*. 2015;7(2):112-123.

52. Dishion TJ, Patterson GR. The development and ecology of antisocial behavior in children and adolescents. In: Cicchetti D, Cohen DJ. *Developmental psychopathology, Volume 3: Risk, disorder, and adaptation.* New York, NY: Wiley & Sons; 2015:503-541.

53. Snyder J, Schrepferman L, McEachern A, Barner S, Johnson K, Provines J. Peer deviancy training and peer coercion: Dual processes associated with early-onset conduct problems. *Child Development*. 2008;79(2):252-268. doi:10.1111/j.1467-8624.2007.01124.x

54. Coley RL, Votruba-Drzal E, Miller PL, Koury A. Timing, extent, and type of child care and children's behavioral functioning in kindergarten. *Developmental Psychology*. 2013;49(10):1859-1873. doi:10.1037/a0031251

55. Vandell DL, Belsky J, Burchinal M, Steinberg L, Vandergrift N, Network NECCR. Do effects of early child care extend to age 15 years? Results from the NICHD Study of Early Child Care and Youth Development. *Child Development*. 2010;81(3):737-756. doi:10.1111/j.1467-

8624.2010.01431.x

56. Snyder J, Schrepferman LP, Bullard L, McEachern AD, Patterson GR. Covert antisocial behavior, peer deviancy training, parenting processes, and sex differences in the development of antisocial behavior during childhood. *Development and Psychopathology*. 2012;24(3):1117-1138. doi:10.1017/S0954579412000570

57. Huitsing G, Monks CP. Who victimizes whom and who defends whom? A multivariate social network analysis of victimization, aggression, and defending in early childhood. *Aggressive Behavior.* 2018;44(4):394-405.

58. Jackson V, Chou S, Browne K. Protective factors against child victimization in the school and community: An exploratory systematic review of longitudinal predictors and interacting variables. *Trauma, Violence & Abuse*. 2017;18(3):303-321.

Early Peer Relations and their Impact on Children's Development

Dale F. Hay, PhD

Cardiff University, United Kingdom

March 2005

Introduction

Students of child development have always drawn attention to the importance of peers, especially in adolescence, when peers may facilitate each other's antisocial behaviour. It has often been assumed that peers are less important in early childhood, when relationships with family members are more influential. However, recent research shows clearly that even infants spend time with peers, and that some three- and four-year-olds are already having trouble being accepted by their peers. Early problems with peers have negative consequences for the child's later social and emotional development. To understand why some children find it hard to relate to peers, it is important to study the early development of peer relations.

Subject

The topic of early peer relations is relevant to policy-makers and service-providers in the educational, social-service and mental-health sectors. In Western society, virtually all children are educated in the company of their peers; in some countries, such as the U.K., statutory education begins as early as four years of age. Problematic peer relations may have adverse effects on the transition to school, with subsequent consequences for academic success. Furthermore, even younger infants and toddlers often spend time with peers through informal arrangements between parents or formal child-care provision. There is considerable interest in the impact of early child care on development, but relatively few studies that actually investigate the quality of peer relations in the child- care context. It is especially important to study peer relations for children with special educational needs. The principle of "mainstreaming" children with special needs is based on the assumption that it is beneficial for such children to spend their days with typically developing peers; however, if those experiences are highly negative, experience with peers may interfere with educational goals.

Problems

There are several important problems to address, which may be framed in terms of the following research questions:

- 1. When do children first develop the ability to relate to other children their own age?
- 2. What skills promote early peer relations?
- 3. Why are some young children less likely to be accepted by their peers?
- 4. Do early peer relations have a long-term impact on the child's development?

Research Context

The information comes from a diverse group of studies. These include experimental and observational studies of infants' and toddlers' interaction with their peers; longitudinal studies of children's social development; educational and psychological studies of children's adjustment to child care and nursery school classrooms; social, psychological, sociometric and ethological studies of young children's social networks and dominance relationships.

Recent Findings Addressing the Key Research Questions

1. *When do children develop the ability to relate to their peers?* Most infants and toddlers meet peers on a regular basis, and some experience long-lasting relationships with particular peers that start at birth.[1] By six months of age, infants can communicate with other infants by smiling, touching and babbling. In the second year of life, they show both prosocial and aggressive behaviour with peers, with some toddlers clearly being more aggressive than others.[1-4]
2. *What skills promote early peer relations?* Although many investigators have described early peer relations, relatively little attention has been paid to the emotional, cognitive and behavioural skills that underlie the ability to interact harmoniously with peers. I have proposed that early peer relations depend on the following skills that develop during the first two years of life: (a) managing joint attention;(b) regulating emotions; (c) inhibiting impulses; (d) imitating another's actions;(e) understanding cause-and-effect relationships; and (f) linguistic competence.[5] Deficits in these skills may be compensated for when children interact with competent adults, such as their parents or teachers, or with tolerant older siblings; however, peers who are also only gradually developing these skills may be less forgiving, and so the peer environment may be especially challenging. Children with

developmental disorders who are impaired in joint attention skills[6] and imitation[7] and children with limited vocabularies[2] may be at special risk, which may account for some of the problematic peer relations in mainstreamed preschool classrooms.[8]

3. *Why do young children accept some peers and reject others?* A great deal of research on peer relations in early childhood has used *sociometric* methods, in which children name those peers they like and (sometimes) dislike. These methods show that some children are accepted by their peers, whereas others are either actively rejected or ignored. Peer acceptance is affected by many factors in a child's life, such as their relationships at home with parents and siblings, the parents' own relationship and the family's levels of social support.[5] However, peer acceptance is most directly affected by children's own behaviour. Studies show that highly aggressive children are not accepted by their peers[9] but this may depend on gender.[10] Furthermore, it may actually be the absence of prosocial behaviour, not the presence of aggression, that promotes peer rejection.[11,12] Under some circumstances, aggressive behaviour is positively associated with social competence.[13] Shy children also experience problems in gaining acceptance in their peer groups. Shyness in the early childhood years has been linked to the child's temperament and earlier emotional reactions to novel situations and to attachment relationships; shy preschoolers are more likely than other children to have mothers who experience social phobias.[14-16]

4. *Do early peer relations have a long-term impact on children's development?* There are clear links between very early peer relations and those that occur later in childhood. For example, toddlers who were able to engage in complex play with peers were more competent in dealing with other children in the preschool years and in middle childhood.[17] Peer acceptance in early childhood is a predictor of later peer relations. Children who were without friends in kindergarten were still having difficulties dealing with peers at the age of 10.[18] It is not clear, however, whether early problems with peers actually cause the later problems, or whether both are caused by other risk factors at home and school and the behavioural tendencies and skill deficits that make it hard to gain acceptance by one's peers. However, the roots of peer rejection lie in the earliest years of childhood, and peer rejection is associated with educational underachievement, even when many other causal influences are taken into account.[19] Put another way, having friends in early childhood appears to protect children against the development of psychological problems later in childhood.[19]

Conclusions

Peers play important roles in children's lives at much earlier points in development than we might have thought. Experiences in the first two or three years of life have implications for children's acceptance by their classmates in nursery school and the later school years. Children who are competent with peers at an early age, and those who show prosocial behaviour, are particularly likely to be accepted by their peers. Aggressive children are often rejected by their peers, although aggression does not always preclude peer acceptance. It is clear that peer relations pose special challenges to children with disorders and others who lack the emotional, cognitive and behavioural skills that underlie harmonious interaction. The risk for children with early behavioural and emotional problems is exacerbated by the peer rejection they experience. Conversely, early friendships and positive relations with peer groups appear to protect children against later psychological problems.

Implications for Policy-Makers and Service-Providers

The evidence just reviewed challenges long-held beliefs about the importance of peers in early development. Whereas once we may have thought that peers began to have an influence on children during the primary school years and adolescence, it now seems possible that very early interactions with peers at home and in child-care settings could set the stage for later problems. At the same time, these findings suggest that it is possible to act early to prevent later problems. Because peer acceptance is associated with better psychological adjustment and educational achievement, programs that support early competence with peers will have implications for educational and mental-health policy. The findings also raise challenging questions about "mainstreaming" policies for children with special educational needs. Problems that have been noted in mainstreamed preschool classrooms may derive from underlying deficits that could be addressed directly. It is therefore important for policy-makers and service-providers to consider ways to facilitate young children's positive relations with their peers.

References

1. Hay DF, Castle J, Davies L, Demetriou H, Stimson CA. Prosocial action in very early childhood. *Journal of Child Psychology and Psychiatry* 1999;40(6):906-916.
2. Dionne G, Tremblay RE, Boivin M, Laplante D, Pérusse D. Physical aggression and expressive vocabulary in 19-month-old twins. *Developmental Psychology* 2003;39(2):261-273.
3. Hay DF, Castle J, Davies L. Toddlers' use of force against familiar peers: A precursor to serious aggression? *Child Development* 2000;71(2):457-467.

©2004-2026 ABILIO | PEER RELATIONS

4. Rubin KH, Burgess KB, Dwyer KM, Hastings PD. Predicting preschoolers' externalizing behaviors from toddler temperament, conflict, and maternal negativity. *Developmental Psychology* 2003;39(1):164-176.
5. Hay DF, Payne A, Chadwick A. Peer relations in childhood. *Journal of Child Psychology and Psychiatry and Allied Disciplines* 2004;45(1):84-108.
6. Charman T, Swettenham J, Baron-Cohen S, Cox A, Baird G, Drew A. Infants with autism: An investigation of empathy, pretend play, joint attention, and imitation. *Developmental Psychology* 1997;33(5):781-789.
7. Rogers SJ, Hepburn SL, Stackhouse T, Wehner E. Imitation performance in toddlers with autism and those with other developmental disorders. *Journal of Child Psychology and Psychiatry and Allied Disciplines* 2003;44(5):763-781.
8. Guralnick MJ, Paul-Brown D, Groom JM, Booth CL, Hammond MA, Tupper DB, Gelenter A. Conflict resolution patterns of preschool children with and without developmental delays in heterogeneous playgroups. *Early Education and Development* 1998;9(1):49-77.
9. Crick NR, Casas JF, Mosher M. Relational and overt aggression in preschool. *Developmental Psychology* 1997;33(4):579-588.
10. Ostrov JM, Keating CF. Gender differences in preschool aggression during free play and structured interactions: An observational study. *Social Development* 2004;13(2):255-277.
11. Denham SA, McKinley M, Couchoud EA, Holt R. Emotional and behavioral predictors of preschool peer ratings. *Child Development* 1990;61(4):1145-1152.
12. Vitaro F, Gagnon C, Tremblay RE. Predicting stable peer rejection from kindergarten to Grade one. *Journal of Clinical Child Psychology* 1990;19(3):257-264.
13. Vaughn BE, Vollenweider M, Bost KK, Azria-Evans MR, Snider JB. Negative interactions and social competence for preschool children in two samples: Reconsidering the interpretation of aggressive behavior for young children. *Merrill-Palmer Quarterly* 2003;49(3):245-278.
14. Rubin KH, Burgess KB, Coplan RJ. Social withdrawal and shyness. In: Smith PK, Hart CH, eds. *Blackwell handbook of childhood social development*. Malden, Mass: Blackwell Publishers; 2002:330-352.
15. Cooper PJ, Eke M. Childhood shyness and maternal social phobia: A community study. *British Journal of Psychiatry* 1999;174:439-443.
16. Howes C, Phillipsen L. Continuity in children's relations with peers. *Social Development* 1998;7(3):340-349.
17. Ladd GW, Troop-Gordon W. The role of chronic peer difficulties in the development of children's psychological adjustment problems. *Child Development* 2003;74(5):1344-1367.
18. Woodward LJ, Fergusson DM. Childhood peer relationship problems and later risks of educational under-achievement and unemployment. *Journal of Child Psychology and Psychiatry and Allied Disciplines* 2000;41(2):191-201.
19. Criss MM, Pettit GS, Bates JE, Dodge KA, Lapp AL. Family adversity, positive peer relationships, and children's externalising behavior: A longitudinal perspective on risk and resilience. *Child Development* 2002;73(4):1220-1237.

Sibling Relations and Their Impact on Children's Development

Nina Howe, PhD, Holly Recchia, PhD, Christine Kinsley, MA

Department of Education and Centre for Research in Human Development, Concordia University, Canada

March 2023, 2e éd. rév.

Introduction

The majority of children around the world have at least one sibling. The sibling relationship is likely to last longer than any other relationship in one's lifetime and plays an integral part in the lives of families. Yet, in comparison to the wealth of studies on parent-child and peer relationships, relatively little attention has been devoted to the role of siblings and their impact on one another's development. In recent decades, research on sibling relations in early childhood has shifted from examining the role of structural variables (e.g., age, birth order) towards more process variables (e.g., positive and negative exchanges). Siblings are viewed as an integral component of family systems[1,2] and as an important context for children's learning and development3 but there are a number of methodological and conceptual challenges to studying siblings from this perspective.

Subject

In early childhood, four major characteristics of sibling relations are prominent.[1,2] First, sibling relationships are emotionally charged, and defined by strong, uninhibited emotions of a positive, negative and sometimes ambivalent quality.[1,2,4-6] Second, sibling relations are often characterized by intimacy: as youngsters spend large amounts of time together, they know each other very well. This long history and intimate knowledge translates into opportunities for providing emotional and instrumental support for one another,[5] for engaging in pretend play,[7-11] humor,[12-15] for conflict,[6,16-21] and for understanding others' points of view and their thoughts and feelings.[22-26] Third, sibships are characterized by large individual differences in the quality of children's relations with one another.[1,2,4,5] Fourth, the age difference between siblings often makes issues of power and control[27-32] as well as rivalry and jealousy[33-35] sources of contention for children, but also provide a context for more positive types of complementary exchanges, such as teaching,[36-40]

helping,[1,2,5,40,41] caregiving interactions,[5,42,43] and prosocial behaviour.[41,44-46] Broadly speaking, the characteristics of sibling relations sometimes make them challenging for parents, because of the potentially emotional and highly charged nature of the relationship. One issue that arises due to age differences is differential parental treatment from the siblings' perspective.[6,47-49]

Problems

There are a number of methodological issues in the sibling literature. Birth order and age differences are confounded in many studies; thus, it is challenging to distinguish between role (i.e., birth order) and developmental differences.[2,20] Recruiting families with young children and collecting data at home can be time-consuming, yet provides rich naturalistic data. To date, research has focused on sibling dyads within middle-class, two-parent, predominantly White families in the US, Canada, and Western Europe. We therefore we know less about families with more than two children, single-parent families,[3,50] from different socioeconomic groups,[3] or families in varied cultures, although there have been some studies of Mayan[46,51,52] and Mexican-American families.[53-55] In more recent years, there are some studies investigating siblings in varied cultural contexts, such as Chinese,[56-58] Greek,[59] and Turkish, Dutch, and Indian families.[60,61]

Research Context

There are a number of longitudinal studies that have followed siblings and families from the birth of a second child[62] and over early childhood and beyond.[26,33,48,63-72] While there is wide variation in how children respond to the birth of a younger sibling, most children are positive and eager to help care for the baby and exhibit little or no disruptive behaviour.[62] By early childhood siblings' positive, friendly interactions often outweigh their negative interactions.[73] Most studies of siblings in early childhood have employed naturalistic observations of siblings interacting at home, usually with their mothers, although some studies have also included fathers.[21,33,56,71,72,74,75] Observational data is complemented by sibling and parent interviews, questionnaires, hypothetical scenarios, structured tasks such as conflict negotiations, teaching tasks, or play sessions and measures of children's cognitive, emotional and social development.

Key Research Questions

A basic question that has driven the research on sibling relations is why some dyads appear to get along so well and act as sources of emotional and instrumental support and companionship for one another, whereas other siblings have a much more troubled and conflictual relationship.

[1,2,17,61,76] Following from this, a number of key questions have been raised:

1. How are the quality and nature of sibling relations associated with social-emotional outcomes, children's adjustment, children's later interactions in other relationships, and their understanding of their social worlds?
2. How should parents intervene in their children's conflicts?
3. What are the connections between differential parental treatment (i.e., when one child is given preferential treatment) and sibling relationships?
4. What are the roles of age, birth order and gender in defining the nature and quality of sibling relations?
5. How does the quality of earlier sibling relations affect sibling interactions over time?

Recent Research Findings

Sibling relations provide an important context for the development of children's understanding of their social, emotional, moral and cognitive worlds.[1,2,26,77] In particular, siblings play a key role in the development of children's understanding of others' minds, namely their understanding of emotions, thoughts, intentions, and beliefs.[1,2,24,77] Siblings seem to demonstrate an understanding of others' minds and emotions during real-life interactions long before they show this understanding on more formal assessments.[1,42,78] In particular, this understanding is revealed during episodes of imitation, teasing, shared humour, pretend play, conflict resolution, teaching, prosocial behaviour, and through their use of connected communications and emotional and mental language during conversations.[1,2,10-15,23,42,45,79-81] Conflict can be an opportunity for siblings to learn constructive resolution skills culminating in a mutually agreeable (win-win) solution for both children, emotional regulation and understanding, and for considering the opponent's perspective.[42] Young siblings who engage in frequent pretend play demonstrate a greater understanding of others' emotions and thoughts, show evidence of creativity in their play themes and object use, and are more likely to construct shared meanings in play.[7,9-11,82,83] Individual differences in pretend play and conflict management strategies predict children's social understanding over time,[14,23,42,63,84] conflict resolution skills at age six,[85] and adjustment to first grade.[86]

One important area of research is related to sibling conflict and the best ways for parents to intervene when children disagree. Sibling conflicts are frequent,[21,87] often poorly resolved,[6,88,89]

and sometimes highly aggressive, violent, or even abusive.[17,61,90] When parents employ harsh, punitive discipline this is associated with greater sibling conflict and less friendly interaction even before the younger child is age 1.[62,73] Coercive and frequent sibling conflict and bullying in childhood are also associated with poorer adjustment both concurrently[16,91] and later in life.[75,92] High levels of conflict may be particularly problematic when they are accompanied by an absence of sibling warmth.[61,76,93] Given these findings, it is not surprising that sibling conflict is a source of worry for parents5 and that they are concerned about the best way to intervene.[33,94] Although most parents intervene by adjudicating,[95] some interventions have trained parents to mediate their children's sibling conflicts.[6,96-100] By structuring the negotiation process and yet leaving the final resolution in the hands of the children themselves, these interventions suggest a promising way to improve conflict outcomes while simultaneously helping children to understand one another and to develop more constructive resolution strategies.

When parents treat their children differently by directly varying amounts of positive affect, responsiveness, control, discipline and intrusiveness to the two children, sibling relations are likely to be more conflictual and less friendly,[47,49,72,101] but only if children view the differences as unfair.[102-105] More broadly speaking, sibling jealousy in the preschool years is linked to lower quality sibling relationships later in childhood.[33,106]

First-born siblings engage in leadership, teaching, caregiving, and helping roles, whereas second-born siblings are more likely to imitate, follow, take on the role of learner, and elicit care and help.[2,6,38,40,45,90,107] Younger siblings often imitate the older child's language and actions during play, which is one way to establish shared meanings.[80,108] Siblings demonstrate the ability to teach one another during semi-structured tasks and also during ongoing interactions while playing together at home,[38,39,55,109-112] while taking into account their sibling's knowledge and understanding.[36,43] During early childhood, siblings can act as sources of support during caretaking situations when parents are absent for a short time[5,43] and in middle childhood siblings may provide support during stressful family experiences.[43,66,113] The natural power differences that result from the age difference between siblings mean that two children are likely to have different experiences in the family. For instance, second-born children have the benefit of learning from an older sibling, sometimes leading to precocious development for second-borns in certain areas.[114]

Older sisters are more likely to engage in caretaking and helping roles than older brothers,[41,43] whereas boys are reported to be more aggressive with siblings than girls according to parent

reports.[17] Nevertheless, there are few consistent gender or age gap differences in sibling relations in early childhood. As second-born siblings become more cognitively, linguistically, and socially competent over the early years, they begin to take on more active roles in sibling interactions, for example by initiating more games or teaching their sibling.[6,38,64] As such, the early power imbalance that exists between siblings seems to become less prominent as siblings age, and interactions become more equitable.[2,6,29,34,50,78]

There is continuity in the quality of sibling relations during the early years and from early to middle childhood to early adolescence, particularly for older siblings' positive behaviour and feelings towards the younger.[53,67,68,80,115,116] However, large individual differences in the quality of sibling relations have been documented in many studies cited here, which may also be influenced by other factors such as children's temperamental profiles,[1,6,62] number of siblings,[69] children's social understanding,[2,24,69] and parenting styles.[62,73,101]

Conclusions

The sibling relationship is a natural laboratory for young children to learn about their world.[2,3] It provides opportunities to learn how to interact with others who are interesting and engaging playmates, to learn how to manage disagreements, and to learn how to regulate both positive and negative emotions in socially acceptable ways.[5,26,42] In this way, it provides a venue for young children to develop an understanding of social relations with family members who may be close and loving at times and at other times, be unkind, exhibit jealousy, or act aggressively.[33,75,92] Further, there are many opportunities for siblings to use their cognitive skills to convince others of their point of view, teach, or imitate the actions of their sibling. The positive benefits of establishing warm and positive sibling relationships may last a lifetime, whereas more difficult early relationships may be associated with problematic developmental outcomes.[17,56,61,76] The task for young siblings (with support from their parents) is to find the balance between the positive and negative aspects of their interactions as both children develop over time.

Implications for Policy and Service Perspectives

Sensitive parenting requires that adults employ developmentally appropriate strategies with children of different ages. Parental strategies for managing sibling conflicts, particularly the promotion of constructive (e.g., negotiated and fair resolutions, prosocial behaviours) versus destructive (e.g., use of coercion and aggression) strategies, is vitally important for learning how

to get along with others.[6,94,98,117] The service and policy implications indicate that some parents may need help with these issues and there is a need for the development of parent education and sibling intervention programs.[6,42,94] Certainly we know from research that interventions to train parents to mediate sibling quarrels can be successful,[6,98,99] but reducing conflict has not generally been associated with an increase in prosocial sibling interactions.[76] Various intervention programs have been developed.[5,6,96,100,118] Some programs have been aimed at assisting parents to develop better guidance strategies, but have not directly targeted siblings themselves. However, one promising social skills intervention program aimed at increasing prosocial interactions between young children was successful in improving sibling relationship quality and emotion regulation skills.[119-121] This program has also resulted in improvements in parental emotional regulation.[122] Clearly, however, further development of intervention programs aimed at improving sibling relationships is an area for future work from both a services and policy perspective.[6,96]

References

1. Dunn J. Sibling relationships. In: Smith PK, Hart CH, eds. *Blackwell Handbook of Childhood Social Development*. Blackwell Publishing; 2002:223-237.

2. Howe N, Paine AL, Recchia H, Ross H. Sibling relations in early childhood. In: Hart C, Smith PK, eds. *Wiley-Blackwell Handbook of Childhood Social Development, 3rd Edition.* Wiley; 2022:443-458.

3. Howe N, Recchia H. Sibling relationships as a context for learning and development. *Early Education and Development*. 2014;25(2):155-159. doi:10.1080/10409289.2014.857562

4. Dunn J. Siblings. In: Grusec J, Hastings P, eds. *Handbook of Socialization: Theory and Research. 2nd ed*. Guilford; 2015:182-201.

5. Kramer L, Conger KJ, Rogers CR, Ravindran N. Siblings. In: Fiese BH, Celano M, Deater-Deckard K, Jouriles EN, Whisman MA, eds. *APA Handbook of Contemporary Family Psychology: Foundations, Methods, and Contemporary Issues across the Lifespan. Vol. 1.* American Psychological Association; 2019:521-538. doi:10.1037/0000099-029

©2004-2026 ABILIO | PEER RELATIONS

6. Volling BL, Howe H, Kramer L. The development of sibling relationships across childhood and adolescence: Recommendations for parents and practitioners. In: Bornstein MH, Shah PE, eds. *Handbook of Pediatric Psychology*. American Psychological Association. In press.

7. Howe N, Petrakos H, Rinaldi CM, LeFebvre R. "This is a bad dog, you know...": Constructing shared meanings during sibling pretend play. *Child Development*. 2005;76(4):783-794. doi:10.1111/j.1467-8624.2005.00877.x

8. Howe N, Abuhatoum S, Chang-Kredl S. "Everything's upside down. We'll call it upside down valley!": Siblings' creative play themes, object use, and language during pretend play. *Early Education and Development*. 2014;25(3):381-398. doi:10.1080/10409289.2013.773254

9. Leach J, Howe N, Dehart G. 'An earthquake shocked up the land!' Children's communication during play with siblings and friends. *Social Development*. 2015;24(1):95-112. doi:10.1111/sode.12086

10. Leach J, Howe N, DeHart G. Children's connectedness and shared meanings strategies during play with siblings and friends. *Infant and Child Development*. 2022;31(6):e2365. doi:10.1002/icd.2365

11. Leach J, Howe N, DeHart G. Children's connectedness with siblings and friends from early to middle childhood during play. *Early Education and Development*. 2022;33(8):1289-1303. doi:10.1080/10409289.2021.1968733

12. Paine AL, Howe N, Karajian G, Hay DF, DeHart G. 'H, I, J, K, L, M, N, O, PEE! Get it? Pee!': Siblings' shared humour in childhood. *British Journal of Developmental Psychology*. 2019;37(3):336-353. doi:10.1111/bjdp.12277

13. Paine AL, Hashmi S, Howe N, Johnson N, Scott M, Hay DF. "A pirate goes nee-nor-nee-nor!" humor with siblings in middle childhood: A window to social understanding? *Developmental Psychology*. 2022;58(10):1986-1998. doi:10.1037/dev0001403

14. Paine AL, Howe N, Gilmore V, Karajian G, DeHart G. “Goosebump man. That’s funny!”: Humor with siblings and friends from early to middle childhood. *Journal of Applied Developmental Psychology.* 2021;77:101321. doi:10.1016/j.appdev.2021.101321

15. Paine AL, Karajian G, Hashmi S, Persram RJ, Howe N. “Where’s your bum brain?” Humor, social understanding, and sibling relationship quality in early childhood. *Social Development*. 2021;30(2):592-611. doi:10.1111/sode.12488

16. Buist KL, Deković M, Prinzie P. Sibling relationship quality and psychopathology of children and adolescents: A meta-analysis. *Clinical Psychology Review.* 2013;33(1):97-106. doi:10.1016/j.cpr.2012.10.007

17. Dirks MA, Recchia HE, Estabrook R, Howe N, Petitclerc A, Burns JL, Briggs-Gowan MJ, Wakschlag LS. Differentiating typical from atypical perpetration of sibling-directed aggression during the preschool years. *Journal of Child Psychology and Psychiatry, and Allied Disciplines*. 2019;60(3):267-276. doi:10.1111/jcpp.12939

18. Howe N, Rinaldi CM, Jennings M, Petrakos H. “No! The lambs can stay out because they got cozies”: Constructive and destructive sibling conflict, pretend play, and social understanding. *Child Development.* 2002;73(5):1460-1473. doi:10.1111/1467-8624.00483

19. Perlman M, Garfinkel DA, Turrell SL. Parent and sibling influences on the quality of children’s conflict behaviours across the preschool period. *Social Development.* 2007;16(4):619-641. doi:10.1111/j.1467-9507.2007.00402.x

20. Recchia HE, Howe N. When do siblings compromise? Associations with children’s descriptions of conflict issues, culpability, and emotions: When do siblings compromise? *Social Development*. 2009;19(4):838-857. doi:10.1111/j.1467-9507.2009.00567.x

21. Ross HS, Filyer RE, Lollis SP, Perlman M, Martin JL. Administering justice in the family. *Journal of Family Psychology*. 1994;8(3):254-273. doi:10.1037/0893-3200.8.3.254

22. Hou XH, Wang LJ, Li M, Qin QZ, Li Y, Chen BB. The roles of sibling status and sibling relationship quality on theory of mind among Chinese preschool children. *Personality and*

Individual Differences. 2022;185:111273. doi:10.1016/j.paid.2021.111273

23. Leach J, Howe N, DeHart G. "I wish my people can be like the ducks": Children's references to internal states with siblings and friends from early to middle childhood: Internal state language. *Infant and Child Development.* 2017;26(5):e2015. doi:10.1002/icd.2015

24. Paine AL, Pearce H, van Goozen SHM, de Sonneville LMJ, Hay DF. Late, but not early, arriving younger siblings foster firstborns' understanding of second-order false belief. *Journal of Experimental Child Psychology*. 2018;166:251-265. doi:10.1016/j.jecp.2017.08.007

25. Recchia HE, Howe N. Family talk about internal states and children's relative appraisals of self and sibling. *Social Development.* 2008;17(4):776-794. doi:10.1111/j.1467-9507.2007.00451.x

26. Tan L, Volling BL, Gonzalez R, LaBounty J, Rosenberg L. Growth in emotion understanding across early childhood: A cohort-sequential model of firstborn children across the transition to siblinghood. *Child Development*. 2022;93(3):e299-e314. doi:10.1111/cdev.13729

27. Abuhatoum S, Della Porta S, Howe N, DeHart G. A longitudinal examination of power in sibling and friend conflict. *Social Development*. 2020;29(3):903-919. doi:10.1111/sode.12433

28. Abuhatoum S, Howe N. Power in sibling conflict during early and middle childhood: Power in sibling conflict. *Social Development*. 2013;22:738-754. doi:10.1111/sode.12021

29. Campione-Barr N. The changing nature of power, control, and influence in sibling relationships. In: Campione-Barr N, ed. *Power, Control, and Influence in Sibling Relationships across Developmen. New Directions for Child and Adolescent Development.* Vol. 156. Jossey-Bass; 2017:7-14. doi:10.1002/cad.20202

30. Della Porta S, Howe N, Persram RJ. Parents' and children's power effectiveness during polyadic family conflict: Process and outcome. *Social Development*. 2019;28(1):152-167.

©2004-2026 ABILIO | PEER RELATIONS

doi:10.1111/sode.12333

31. Della Porta S, Persram RJ, Howe N, Ross HS. Young children's differential use of power during family conflict: A longitudinal study. *Social Development.* 2022;31(1):165-179. doi:10.1111/sode.12527

32. Della Porta S, Howe N. Mothers' and children's perceptions of power through personal, conventional, and prudential conflict situations. *Merrill-Palmer Quarterly*. 2012;58(4):507-529. doi:10.1353/mpq.2012.0024

33. Kolak AM, Volling BL. Sibling jealousy in early childhood: longitudinal links to sibling relationship quality. *Infant and Child Development*. 2011;20(2):213-226. doi:10.1002/icd.690

34. Volling BL, Kennedy DE, Jackey LMH. The development of sibling jealousy. In: Legerstee M, Hart S, eds. *Handbook of Jealousy: Theory, Research, and Multidisciplinary Approaches.* Blackwell Publishers; 2010:387-417.

35. Volling BL, Yu T, Gonzalez R, Kennedy DE, Rosenberg L, Oh W. Children's responses to mother–infant and father–infant interaction with a baby sibling: Jealousy or joy? *Journal of Family Psychology*. 2014;28(5):634-644. doi:10.1037/a0037811

36. Abuhatoum S, Howe N, Della Porta S, Recchia H, Ross H. Siblings' understanding of teaching in early and middle childhood: "Watch me and you'll know how to do it." *Journal of Cognition and Development*. 2016;17(1):180-196. doi:10.1080/15248372.2015.1042579

37. Howe N, Adrien E, Della Porta S, et al. "Infinity means it goes on forever": Siblings' teaching of mathematics during naturalistic home interactions. *Infant and Child Development.* 2016;25(2):137-157. doi:10.1002/icd.1928

38. Howe N, Della Porta S, Recchia H, Ross H. "Because if you don't put the top on, it will spill": A longitudinal study of sibling teaching in early childhood. *Developmental Psychology.* 2016;52(11):1832-1842. doi:10.1037/dev0000193

©2004-2026 ABILIO | PEER RELATIONS

39. Howe N, Recchia H, Porta SD, Funamoto A. “The driver doesn’t sit, he stands up like the Flintstones!”: Sibling teaching during teacher-directed and self-guided tasks. *Journal of Cognition and Development.* 2012;13(2):208-231. doi:10.1080/15248372.2011.577703

40. Klein PS, Feldman R, Zarur S. Mediation in a sibling context: the relations of older siblings’ mediating behaviour and younger siblings’ task performance. *Infant and Child Development*. 2002;11(4):321-333. doi:10.1002/icd.261

41. White N, Ensor R, Marks A, Jacobs L, Hughes C. “It’s mine!” Does sharing with siblings at age 3 predict sharing with siblings, friends, and unfamiliar peers at age 6? *Early Education and Development*. 2014;25(2):185-201. doi:10.1080/10409289.2013.825189

42. Kramer L. Learning emotional understanding and emotion regulation through sibling interaction. *Early Education and Development*. 2014;25(2):160-184. doi:10.1080/10409289.2014.838824

43. Kramer L, Hamilton TN. Sibling caregiving. In: Bornstein MH, ed. *Handbook of Parenting. Vol 1. Children and parenting. 3rd ed*. New York: Routledge; 2019:372-408.

44. Tavassoli, Howe, DeHart. Investigating the development of prosociality through the lens of refusals: Children’s prosocial refusals with siblings and friends. *Merrill-Palmer Quarterly.* 2020;66(4):421. doi:10.13110/merrpalmquar1982.66.4.0421

45. Tavassoli N, Recchia H, Ross H. Preschool children’s prosocial responsiveness to their siblings’ needs in naturalistic interactions: A longitudinal study. *Early Education and Development.* 2019;30(6):724-742. doi:10.1080/10409289.2019.1599095

46. Tavassoli N, Dunfield K, Kleis A, Recchia H, Conto LP. Preschoolers’ responses to prosocial opportunities during naturalistic interactions with peers: A cross-cultural comparison. *Social Development*. 2023;32(1):204-222. doi:10.1111/sode.12620

47. Meunier JC, Roskam I, Stievenart M, De Moortele GV, Browne DT, Wade M. Parental differential treatment, child’s externalizing behavior and sibling relationships: Bridging links with child’s perception of favoritism and personality, and parents’ self-efficacy.

Journal of Social and Personal Relationships. 2012;29(5):612-638. doi:10.1177/0265407512443419

48. Richmond MK, Stocker CM, Rienks SL. Longitudinal associations between sibling relationship quality, parental differential treatment, and children's adjustment. *Journal of Family Psychology*. 2005;19(4):550-559. doi:10.1037/0893-3200.19.4.550

49. Volling BL. The family correlates of maternal and paternal perceptions of differential treatment in early childhood. *Family Relations*. 1997;46(3):227-236. doi:10.2307/585120

50. Harrist AW, Achacoso JA, John A, Pettit GS, Bates JE, Dodge KA. Reciprocal and complementary sibling interactions: Relations with socialization outcomes in the kindergarten classroom. *Early Education and Development.* 2014;25(2):202-222. doi:10.1080/10409289.2014.848500

51. Maynard AE. Cultural teaching: The development of teaching skills in Maya sibling interactions. *Child Development*. 2002;73(3):969-982. doi:10.1111/1467-8624.00450

52. Maynard AE. Cultures of teaching in childhood: Formal schooling and Maya sibling teaching at home. *Cognitive Development*. 2004;19(4):517-535. doi:10.1016/j.cogdev.2004.09.005

53. Gamble WC, Yu JJ. Young children's sibling relationship interactional types: Associations with family characteristics, parenting, and child characteristics. Early Education and Development. 2014;25(2):223-239. doi:10.1080/10409289.2013.788434

54. Modry-Mandell KL, Gamble WC, Taylor AR. Family emotional climate and sibling relationship quality: Influences on behavioral problems and adaptation in preschool-aged children. *Journal of Child and Family Studies*. 2007;16(1):59-71. doi:10.1007/s10826-006-9068-3

55. Pérez-Granados DR, Callanan MA. Parents and siblings as early resources for young children's learning in Mexican-descent families. *Hispanic Journal of Behavioral Sciences.* 1997;19(1):3-33. doi:10.1177/07399863970191001

56. Chen B, Volling BL. Paternal and maternal rejection and Chinese children's internalizing and externalizing problems across the transition to siblinghood: A developmental cascade model of family influence. *Child Development*. 2023;94(1):288-302. doi:10.1111/cdev.13857

57. Lam CB, McHale SM, Lam CS, Chung KKH, Cheung RYM. Sibling relationship qualities and peer and academic adjustment: A multi-informant longitudinal study of Chinese families. *Journal of Family Psychology.* 2021;35(5):584-594. doi:10.1037/fam0000744

58. Qian G, Chen X, Jiang S, Guo X, Tian L, Dou G. Temperament and sibling relationships: The mediating effect of social competence and behavior. *Current Psychology.* 2022;41(9):6147-6153. doi:10.1007/s12144-020-01080-w

59. Tsamparli A, Halios H. Quality of sibling relationship and family functioning in Greek families with school-age children. *Journal of Psychologists and Counsellors in Schools*. 2019;29(2):190-205. doi:10.1017/jgc.2019.9

60. Buist KL, Metindogan A, Coban S, Watve S, Paranjpe A, Koot HM, van Lier P, Branje SJT, Meeus WHJ. Cross-cultural differences in sibling power balance and its concomitants across three age periods. In: Campione-Barr N, ed. *Power, Control, and Influence in Sibling Relationships across Development. New Directions for Child and Adolescent Development.* Vol 156. Jossey-Bass; 2017:87-104.

61. Buist KL, Vermande M. Sibling relationship patterns and their associations with child competence and problem behavior. *Journal of Family Psychology*. 2014;28(4):529-537. doi:10.1037/a0036990

62. Volling BL, Gonzalez R, Oh W, et al. Developmental trajectories of children's adjustment across the transition to siblinghood: Pre-birth predictors and sibling outcomes at one year. *Monographs of the Society for Research in Child Development.* 2017;82(3):1-215. doi:10/1111/mono.12319

63. Corter C, Abramovitch R, Pepler DJ. The role of the mother in sibling interaction. *Child Development*. 1983;54(6):1599-1605. doi:10.2307/1129823

64. Dunn J. Children's family relationships between two and five: Developmental changes and individual differences. *Social Development.* 1996;5(3):230-250. doi:10.1111/j.1467-9507.1996.tb00083.x

65. Dunn J, Kendrick C. The speech of two- and three-year-olds to infant siblings: 'baby talk' and the context of communication. *Journal of Child Language*. 1982;9(3):579-595. doi:10.1017/S030500090000492X

66. Gass K, Jenkins J, Dunn J. Are sibling relationships protective? A longitudinal study. *Journal of Child Psychology and Psychiatry, and Allied Disciplines*. 2007;48(2):167-175. doi:10.1111/j.1469-7610.2006.01699.x

67. Howe N, Fiorentino LM, Gariepy N. Sibling conflict in middle childhood: Influence of maternal context and mother-sibling interaction over four years. Merrill-Palmer Quarterly. 2003;49(2):183-208. doi:10.1353/mpq.2003.0008

68. Pike A, Oliver BR. Child behavior and sibling relationship quality: A cross-lagged analysis. *Journal of Family Psychology*. 2017;31(2):250-255. doi:10.1037/fam0000248

69. Prime H, Plamondon A, Pauker S, Perlman M, M. Jenkins J. Sibling cognitive sensitivity as a moderator of the relationship between sibship size and children's theory of mind: A longitudinal analysis. *Cognitive Development*. 2016;39:93-102. doi:10.1016/j.cogdev.2016.03.005

70. Stewart RB, Mobley LA, van Tuyl SS, Salvador MA. The firstborn's adjustment to the birth of a sibling: A longitudinal assessment. *Child Development*. 1987;58(2):341-355. doi:10.2307/1130511

71. Volling BL, Oh W, Gonzalez R, Bader LR, Tan L, Rosenberg L. Changes in children's attachment security to mother and father after the birth of a sibling: Risk and resilience in the family. *Development and Psychopathology*. 2021:1-17. doi:10.1017/S0954579421001310

72. Volling BL, Belsky J. The contribution of mother-child and father-child relationships to the quality of sibling interaction: A longitudinal study. *Child Development*. 1992;63(5):1209-1222. doi:10.2307/1131528

73. Oh W, Volling BL, Gonzalez R. Trajectories of children's social interactions with their infant sibling in the first year: A multidimensional approach. *Journal of Family Psychology.* 2015;29(1):119-129. doi:10.1037/fam0000051

74. Brody GH, Stoneman Z, McCoy JK. Associations of maternal and paternal direct and differential behavior with sibling relationships: Contemporaneous and longitudinal analyses. *Child Development*. 1992;63(1):82-92. doi:10.2307/1130903

75. Dantchev S, Zammit S, Wolke D. Sibling bullying in middle childhood and psychotic disorder at 18 years: a prospective cohort study. *Psychological Medicine*. 2018;48(14):2321-2328. doi:10.1017/S0033291717003841

76. Dirks MA, Persram R, Recchia HE, Howe N. Sibling relationships as sources of risk and resilience in the development and maintenance of internalizing and externalizing problems during childhood and adolescence. *Clinical Psychology Review*. 2015;42:145-155. doi:10.1016/j.cpr.2015.07.003

77. Carpendale JI, Lewis C. The development of social understanding. In: Liben LS, Müller U, Lerner RM, eds. *Handbook of Child Psychology and Developmental Science. Vol. 2. Cognitive Processes.* Wiley; 2015:381-424.

78. Volling BL. Sibling relationships. In: Bornstein MH, Davidson L, Keyes CLM, Moore KA, eds. *Well-Being: Positive Development Across the Life Course.* Lawrence Erlbaum Associates; 2003:205-220.

79. Howe N, Rosciszewska J, Persram RJ. "I'm an ogre so I'm very hungry!" "I'm assistant ogre": The Social Function of Sibling Imitation in Early Childhood. *Infant and Child Development*. 2018;27(1):e2040. doi:10.1002/icd.2040

80. Howe N, Persram RJ, Bergerorn C. Imitation as a learning strategy during sibling teaching. *Journal of Cognition and Development*. 2019;20(4):466-486. doi:10.1080/15248372.2019.1614591

81. Hughes C, Fujisawa KK, Ensor R, Lecce S, Marfleet R. Cooperation and conversations about the mind: A study of individual differences in 2-year-olds and their siblings. *British Journal of Developmental Psychology.* 2006;24(1):53-72. doi:10.1348/026151005X82893

82. Cutting AL, Dunn J. Conversations with siblings and with friends: Links between relationship quality and social understanding. *British Journal of Developmental Psychology*. 2006;24(1):73-87. doi:10.1348/026151005X70337

83. Howe N, Petrakos H, Rinaldi CM. "All the sheeps are dead. He murdered them": Sibling pretense, negotiation, internal state language, and relationship quality. *Child Development.* 1998;69(1):182-191. doi:10.2307/1132079

84. Youngblade LM, Dunn J. Social pretend with mother and sibling: Individual differences and social understanding. In: Pellegrini AD, ed. *The future of play theory: A multidisciplinary inquiry into the contributions of Brian Sutton-Smith*. State University of New York Press; 1995:221-239.

85. Herrera C, Dunn J. Early experiences with family conflict: Implications for arguments with a close friend. *Developmental Psychology*. 1997;33(5):869-881. doi:10.1037/0012-1649.33.5.869

86. Donelan-McCall N, Dunn J. School work, teachers, and peers: The world of first grade. *International Journal of Behavioral Development*. 1997;21(1):155-178. doi:10.1080/016502597385036

87. Dunn J, Munn P. Sibling quarrels and maternal intervention: Individual differences in understanding and aggression. *Journal of Child Psychology and Psychiatry, and Allied Disciplines.* 1986;27(5):583-595. doi:10.1111/j.1469-7610.1986.tb00184.x

©2004-2026 ABILIO | PEER RELATIONS

88. Siddiqui AA, Ross HS. How do sibling conflicts end? *Early Education and Development*. 1999;10(3):315-332. doi:10.1207/s15566935eed1003_5

89. Vuchinich S. Starting and stopping spontaneous family conflicts. *Journal of Marriage and the Family.* 1987;49(3):591-601. doi:10.2307/352204

90. Abramovitch R, Corter C, Pepler DJ, Stanhope L. Sibling and peer interaction: A final follow-up and a comparison. *Child Development.* 1986;57(1):217-229. doi:10.2307/1130653

91. Tucker CJ, Finkelhor D, Turner H, Shattuck A. Association of sibling aggression with child and adolescent mental health. *Pediatrics*. 2013;132(1):79-84. doi:10.1542/peds.2012-3801

92. Bowes L, Wolke D, Joinson C, Lereya ST, Lewis G. Sibling bullying and risk of depression, anxiety, and self-harm: A prospective cohort study. *Pediatrics*. 2014;134(4):e1032-e1039. doi:10.1542/peds.2014-0832

93. McGuire S, McHale SM, Updegraff K. Children's perceptions of the sibling relationship in middle childhood: Connections within and between family relationships. *Personal Relationships*. 1996;3(3):229-239. doi:10.1111/j.1475-6811.1996.tb00114.x

94. Pickering JA, Sanders MR. Integrating parents' views on sibling relationships to tailor an evidence-based parenting intervention for sibling conflict. *Family Process.* 2017;56(1):105-125. doi:10.1111/famp.12173

95. Ross H, Martin J, Perlman M, Smith M, Blackmore E, Hunter J. Autonomy and authority in the resolution of sibling disputes. In: Killen M, ed. *Children's autonomy, social competence, and interactions with adults and other children: Exploring connections and consequences*. San Francisco, CA: Jossey-Bass; 1996:71-90.

96. Leijten P, Melendez-Torres GJ, Oliver BR. Parenting programs to improve sibling interactions: A meta-analysis. *Journal of Family Psychology*. 2021;35(5):703-708. doi:10.1037/fam0000833

97. Ross HS. Parent mediation of sibling conflict: Addressing issues of fairness and morality. In: Wainryb C, Recchia H, eds. *Talking about right and wrong: Parent-child conversations as contexts for moral development.* Cambridge University Press; 2014:143-167.

98. Ross HS, Lazinski MJ. Parent mediation empowers sibling conflict resolution. *Early Education and Development.* 2014;25(2):259-275. doi:10.1080/10409289.2013.788425

99. Siddiqui A, Ross H. Mediation as a method of parent intervention in children's disputes. *Journal of Family Psychology*. 2004;18(1):147-159. doi:10.1037/0893-3200.18.1.147

100. Volling BL, Bae Y, Rosenberg L, Beyers-Carlson EEA, Tolman RM, Swain JE. Firstborn children's reactions to mother-doll interaction do not predict their jealousy of a newborn sibling: A longitudinal pilot study. *Journal of Perinatal Education*. 2022;31(4):206-215. doi:10.1891/JPE-2021-0017

101. Jenkins J, Rasbash J, Leckie G, Gass K, Dunn J. The role of maternal factors in sibling relationship quality: a multilevel study of multiple dyads per family: Multilevel study of sibling relationship quality. *Journal of Child Psychology and Psychiatry*. 2012;53(6):622-629. doi:10.1111/j.1469-7610.2011.02484.x

102. Kowal A, Kramer L, Krull JL, Crick NR. Children's perceptions of the fairness of parental preferential treatment and their socioemotional well-being. *Journal of Family Psychology*. 2002;16(3):297-306. doi:10.1037/0893-3200.16.3.297

103. Kowal AK, Krull JL, Kramer L. How the differential treatment of siblings is linked with parent-child relationship quality. *Journal of Family Psychology*. 2004;18(4):658-665. doi:10.1037/0893-3200.18.4.658

104. Kowal A, Kramer L. Children's understanding of parental differential treatment. *Child Development.* 1997;68(1):113-126. doi:10.2307/1131929

105. Perlman J, Howe N. The psychosocial effects of having a sibling with autism spectrum disorder. *Exceptionality Education International*. 2020;30(3):82-101. doi:10.5206/eei.v30i3.13443

106. Miller AL, Volling BL, McElwain NL. Sibling jealousy in a triadic context with mothers and fathers. *Social Development*. 2000;9(4):433-457. doi:10.1111/1467-9507.00137

107. Azmitia M, Hesser J. Why siblings are important agents of cognitive development: A comparison of siblings and peers. *Child Development*. 1993;64(2):430-444. doi:10.2307/1131260

108. Barr R, Hayne H. It's not what you know, it's who you know: Older siblings facilitate imitation during infancy. *International Journal of Early Years Education*. 2003;11(1):7-21. doi:10.1080/09669760304714

109. Recchia HE, Howe N, Alexander S. "You didn't teach me, you showed me": Variations in sibling teaching strategies in early and middle childhood. *Merrill-Palmer Quarterly.* 2008;55(1):55-78. doi:10.1353/mpq.0.0016

110. Howe N, Della Porta S, Recchia H, Funamoto A, Ross H. "This bird can't do it 'cause this bird doesn't swim in water": Sibling teaching during naturalistic home observations in early childhood. *Journal of Cognition and Development.* 2015;16(2):314-332. doi:10.1080/15248372.2013.848869

111. Howe N, Recchia H. Individual differences in sibling teaching in early and middle childhood. *Early Education & Development*. 2009;20(1):174-197. doi:10.1080/10409280802206627

112. Prime H, Perlman M, Tackett JL, Jenkins JM. Cognitive sensitivity in sibling interactions: Development of the construct and comparison of two coding methodologies. *Early Education and Development.* 2014;25(2):240-258. doi:10.1080/10409289.2013.821313

113. Jenkins J. Sibling relationships in disharmonious homes: Potential difficulties and protective effects. In: Boer F, Dunn J, eds. *Children's Sibling Relationships: Developmental and Clinical Issues.* Lawrence Erlbaum Associates; 1992:125-138.

114. Perner J, Ruffman T, Leekam SR. Theory of mind is contagious: You catch it from your sibs. *Child Development.* 1994;65(4):1228-1238. doi:10.2307/1131316

115. Dunn J, Slomkowski C, Beardsall L. Sibling relationships from the preschool period through middle childhood and early adolescence. *Developmental Psychology.* 1994;30(3):315-324. doi:10.1037/0012-1649.30.3.315

116. Stillwell R, Dunn J. Continuities in sibling relationships: Patterns of aggression and friendliness. *Journal of Child Psychology and Psychiatry, and Allied Disciplines*. 1985;26(4):627-637. doi:10.1111/j.1469-7610.1985.tb01645.x

117. Della Porta S, Howe N. Siblings' power and influence in polyadic family conflict during early childhood. In: Campione-Barr N, ed. *Power, Control, and Influence in Sibling Relationships across Development. New Directions for Child and Adolescent Development.* Vol. 156. Jossey-Bass; 2017:15-31. doi:10.1002/cad.20200

118. Haukeland YB, Czajkowski NO, Fjermestad KW, Silverman WK, Mossige S, Vatne TM. Evaluation of "SIBS," An intervention for siblings and parents of children with chronic disorders. *Journal of Child and Family Studies*. 2020;29(8):2201-2217. doi:10.1007/s10826-020-01737-x

119. Kennedy DE, Kramer L. Improving emotion regulation and sibling relationship quality: The more fun with sisters and brothers program. *Family Relations*. 2008;57(5):567-578. doi:10.1111/j.1741-3729.2008.00523.x

120. Kramer L. The essential ingredients of successful sibling relationships: An emerging framework for advancing theory and practice. *Child Development Perspectives*. 2010;4(2):80-86. doi:10.1111/j.1750-8606.2010.00122.x

121. Kramer L, Radey C. Improving sibling relationships among young children: A social skills training model. *Family Relations*. 1997;46(3):237-246. doi:10.2307/585121

122. Ravindran N, Engle JM, McElwain NL, Kramer L. Fostering parents' emotion regulation through a sibling-focused experimental intervention. *Journal of Family Psychology*. 2015;29(3):458-468. doi:10.1037/fam0000084

Prevention and Intervention Programs Promoting Positive Peer Relations in Early Childhood

[1]Carla Kalvin, PhD, [2]Karen L. Bierman, PhD, [3]Stephen A. Erath, PhD

[1]Yale School of Medicine, USA; [2]Pennsylvania State University, USA; [3]Auburn University, USA

May 2023, 2e éd. rév.

Introduction

Under optimal conditions, children learn core social-emotional skills during the preschool years that enable them to establish and maintain their first friendships, get along well as members of their peer communities, and participate effectively in school. Children who are delayed in their acquisition of these social-emotional competencies are at heightened risk for significant peer problems and behavioural difficulties when they enter grade school[1] which can escalate to more serious emotional difficulties and antisocial behaviours in adolescence.[2] Hence, promoting social-emotional development during the preschool years is a priority.

Subject

Empirical evidence indicates that several intervention approaches effectively promote social-emotional development and enhance positive peer relations in the preschool years.[1,3] Universal (or tier 1) interventions are implemented by preschool teachers and are designed to benefit all children in a classroom. Selective/indicated (or tier 2/3) interventions are implemented by teachers or specialists and focus on remediating skill deficits and reducing the existing problems of children with social-emotional delays or behavioural disturbances. Prevention research suggests that the coordinated nesting of universal and indicated preventive interventions may provide an optimal “continuum” of services, making appropriate levels of support available to children and families who vary in their level of need.[4] A rapidly growing research base has identified multiple universal social-emotional learning (SEL) programs that effectively boost the social-emotional and self-regulation competencies of preschool children, fostering positive peer relations in early childhood classrooms.[5] The research base validating the effectiveness of early childhood selective and indicated interventions is less well-developed and an area in need of future study.[6]

Problems

To effectively promote positive peer relations, preschool programs need to target the social-emotional skills that are “competence correlates” – skills that are associated with peer acceptance and protect against peer rejection.[1,7] During the preschool years, these skills include: 1) cooperative play skills (taking turns, sharing toys, collaborating in pretend play and responding positively to peers); 2) language and communication skills (conversing with peers, suggesting and elaborating joint play themes, asking questions and responding to requests for clarification, inviting others to play); 3) emotional understanding and regulation (identifying the feelings of self and other, regulating affect when excited or upset, inhibiting emotional outbursts and coping with everyday frustrations); and 4) aggression control and social problem-solving skills (inhibiting reactive aggression, managing conflicts verbally, generating alternative solutions to social problems and negotiating with peers).[8,9] A particular goal at this age is to strengthen the self-regulation skills that can help children adapt effectively to the behavioural and social demands of the school setting.[10]

Research Context

Developmental research suggests that social-emotional competencies can be taught using explicit coaching strategies that include skill explanations, demonstrations, and practice activities.[11] Evidence-based preschool social-emotional learning (SEL) programs provide teachers with lessons, stories, puppets, and activities that introduce social-emotional skills. In addition, positive behavioural management strategies (e.g., the systematic use of instructions, contingent reinforcement, redirection, and limit-setting) have been used effectively to reduce social behaviour problems and foster positive peer interactions. Child social-emotional development and peer relations are heavily influenced by the interpersonal dynamics of the classroom, making it important to promote a positive climate characterized by warm and responsive student-teacher and peer interactions as well as supporting skill-building opportunities in the classroom.[1,12] Randomized trials provide evidence of effectiveness for multiple preschool SEL and positive behavioural management programs;[3,13,14,15] a few examples are illustrated below.

Key Research Questions

Meta-analyses of well-controlled studies consistently conclude that preschool SEL programming has benefits, but there is considerable variability among programs in terms of the intervention approach taken, and degree and type of ouctomes.[3,14] Research is needed to better understand the short- and long-term impact of different intervention approaches and components. Universal

classroom programs focus on boosting the SEL of all children, selective and indicated programs more often focus on managing behaviour problems.[16] Questions remain regarding the optimal design and focus of interventions to promote social competence for preschool children: what works best for which students under what conditions? What are the relative benefits of universal and selective/indicated early intervention strategies? How might indicated programs be nested within universal programs? What intervention strategies optimize engagement and learning? What environmental arrangements promote generalization of skills to the naturalistic peer context? What is the value of linking social competence promotion programs at school with parent-focused early intervention programs?

Recent Research Results

Several universal-level SEL curricula have proven effective in randomized trials, demonstrating that the use of explicit coaching strategies at the classroom level can promote preschool social-emotional skill development.[1,3] Intervention approaches appear strongest when teachers follow a curriculum to teach and support SEL systematically over the course of a year.[17] An example is the Preschool PATHS (Promoting Alternative Thinking Strategies) program which provides 33 weekly lessons on friendship skills, emotional understanding, self-control, and social problem-solving skills.[18] Teachers present skills using stories, puppets, and role-plays and then support skill development throughout the day by using proactive classroom management strategies, emotion coaching, and problem-solving dialogue. In several randomized trials, Preschool PATHS has increased child emotion knowledge and problem-solving skills and improved their social competence.[18,19,20] In another trial, Preschool PATHS was combined with additional intervention components targeting language and literacy skills (Head Start REDI) and produced sustained benefits for preschool children that included improved learning engagement and social competence with benefits still evident in adolescence.[21]

Programs that focus on structuring the preschool environment with positive behavioural management strategies also show great promise. A good example is the Incredible Years Teacher Training Program (IY) which focuses on increasing teacher use of proactive guidance and specific, contingent attention and praise to support positive behaviours; applying non-punitive consequences to decrease inappropriate behaviours; and building positive student-teacher relationships. Several randomize trials validate the efficacy of this program to reduce levels of aggressive and disruptive behaviours in preschool classrooms.[20,22,23]

The research base supporting social competence coaching programs at the selective/indicated level is weaker and an area in need of more research,[6] although several intervention approaches appear promising. Programs that coach young children in cooperative play and communication skills (e.g. initiating play, asking questions, supporting peers) may improve the social inclusion of children who are socially withdrawn or have developmental disabilities, especially when combined with classroom supports (selective reinforcement and environmental engineering of opportunities for peer play).[24] One example is the Resilient Peer Treatment program for socially withdrawn, maltreated preschool children, which trains adult coaches to scaffold guided play sessions including target children and prosocial peer partners. The coach scaffolds and reinforces positive social behaviour, thereby increasing collaborative and interactive play.[25] Social-emotional skill training may also help preschool and early elementary children who display aggressive-disruptive conduct problems and experience associated peer problems. For example, the small group program, Incredible Years Dinosaur Social Skills and Problem-Solving Curriculum has reduced problem behaviours and promoted social problem-solving skills in a randomized trial.[26] Individualized behavioural management programs may be particularly beneficial for preschool children with elevated aggressive and disruptive behaviours. For example, the BEST in CLASS intervention combines a classroom-level focus on positive behavioural management with individualized management for at-risk students, demonstrating positive preliminary effects on children's social behaviour and social skills.[16]

Conclusions

The preschool years represent an ideal time for preventive and educational interventions designed to promote social-emotional development and peer interaction competencies. A number of universal and selective/indicated programs have proven effective in promoting the social-emotional competencies of preschool children, contributing to their peer acceptance and school readiness. These model programs provide evidence that systematic instruction and positive behavioural management can enhance social-emotional development and promote positive peer relations among preschool children.

Implications

Evidence-based approaches to promoting social-emotional competencies and positive peer relations need to be diffused widely into preschools and child-care centres. Additional research is needed to expand and refine available evidence-based programs, as well as to identify optimal

supports for high-fidelity implementation, sustained use, and work-force professional development support. Recent research suggests added benefits when preschools develop partnerships with families to support child social-emotional development.[27] Additional research is needed to identify the optimal approaches to partnering with parents in preschool-based efforts to promote SEL and positive peer relations.

References

1. Pepler DJ, Bierman KL. *With a little help from my friends: The importance of peer relationships for social-emotional development. Issue brief.* Edna Bennett Pierce Prevention Research Center, Pennsylvania State University; 2018.
2. Choukas-Bradley S, Prinstein MJ. Peer relationships and the development of psychopathology. In: Lewis M, Rudolph KD, eds. *Handbook of developmental psychopathology*. Boston, MA: Springer; 2014:185-204.
3. Blewitt C, Fuller-Tyszkiewicz M, Nolan A, et al. Social and emotional learning associated with universal curriculum-based interventions in early childhood education and care centers. *JAMA Network Open.* 2018;1(8):e185727.
4. McLeod BD, Sutherland KS, Martinez RG, Conroy MA, Snyder PA, Southam-Gerow MA. Identifying common practice elements to improve social, emotional and behavioral outcomes of young children in early childhood classrooms. *Prevention Science*. 2017;18(2):204-213.
5. McClelland MM, Tominey SL, Schmitt SA, Duncan R. SEL interventions in early childhood. *Future of Children*. 2017;27(1):33-47.
6. Shepley C, Grisham-Brown J. Multi-tiered systems of support for preschool-aged children: A review and meta-analysis. *Early Childhood Research Quarterly*. 2019;47:296-308.
7. Mondi CF, Giovanelli A, Reynolds A. Fostering socio-emotional learning through early childhood intervention. *International Journal of Child Care and Education Policy.* 2021;15(6).
8. Denham SA. *The development of emotional competence in young children.* New York: Guilford Publications; 2023.
9. Jones SM, Zaslow M, Darling-Churchill KE, Halle TG. Assessing early childhood social and emotional development: Key conceptual and measurement issues. *Journal of Applied*

Developmental Psychology. 2016;45:42-48.

10. Ursache A, Blair C, Raver CC. The promotion of self-regulation as a means of enhancing school readiness and early achievement in children at risk for school failure. *Child Development Perspectives*. 2012;6(2):122-128.
11. Bierman KL. *Peer rejection: Developmental processes and intervention strategies.* New York: Guilford; 2004.
12. Valiente C, Swanson J, DeLay D, Fraser AM, Parker JH. Emotion-related socialization in the classroom: Considering the roles of teachers, peers, and the classroom context. *Developmental Psychology*. 2020;56(3):578-594.
13. Gershon P, Pellitteri J. Promoting emotional intelligence in preschool education: A review of programs. *International Journal of Emotional Education.* 2018;10(2):26-41.
14. Murano D, Sawyer JE, Lipnevich AA. A meta-analytic review of preschool social and emotional learning interventions. *Review of Educational Research*. 2020;90(2):227-263.
15. Ștefan CA, Dănilă I, Cristescu D. Classroom-wide school interventions for preschoolers' social-emotional learning: A systematic review of evidence-based programs. *Educational Psychology Review*. 2022;34(4):2971-3010.
16. Sutherland KS, Conroy MA, Algina J, Ladwig C, Jessee G, Gyure M. Reducing child problem behaviors and improving teacher-child interactions and relationships: A randomized controlled trial of BEST in CLASS. *Early Childhood Research Quarterly*. 2018;42:31-43.
17. Joo S, Magnuson K, Duncan GJ, Schindler HS, Yoshikawa H, Ziol-Guest KM. What works in early childhood education programs? A meta-analysis of preschool enhancement programs. *Early Education and Development*. 2020;31(1):1-26.
18. Domitrovich CE, Cortes R, Greenberg MT. Improving young children's social and emotional competence: A randomized trial of the preschool PATHS curriculum. *Journal of Primary Prevention*. 2007;28(2):67-91.
19. Hamre BK, Pianta RC, Mashburn AJ, Downer J. Promoting young children's social competence through the Preschool PATHS Curriculum and My Teaching Partner professional development resources. *Early Education and Development*. 2012;23(6):809-832.

©2004-2026 ABILIO | PEER RELATIONS

20. Morris P, Mattera SK, Castells N, Bangser M, Bierman K, Raver C. Impact Findings from the Head Start CARES Demonstration: National Evaluation of Three Approaches to Improving Preschoolers' Social and Emotional Competence. OPRE Report 2014-44. Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services, 2014.
21. Bierman KL, Heinrichs BS, Welsh JA, Nix RL. Reducing adolescent psychopathology in socioeconomically disadvantaged children with a preschool intervention: A randomized controlled trial. *American Journal of Psychiatry*. 2020;178(4):305-312.
22. Webster-Stratton C, Reid MJ, Hammond M. Preventing conduct problems, promoting social competence: A parent and teacher training partnership in Head Start. *Journal of Clinical Child & Adolescent Psychology.* 2001;30(3):283-302.
23. Raver CC, Jones SM, Li-Grining C, Zhai F, Bub K, Pressler E. CSRP's impact on low-income preschoolers' preacademic skills: Self-regulation as a mediating mechanism. *Child Development*. 2011;82(1):362-378.
24. Brown WH, Odom SL, McConnell SR, Rathel JM. Peer interaction interventions for preschool children with developmental difficulties. In: Brown WH, Odom SL, McConnell SR, eds. *Social competence of young children: Risk, disability, and intervention*. Baltimore, MD: Paul H. Brookes; 2008:141-163.
25. Fantuzzo J, Manz P, Atkins M, Meyers R. Peer-mediated treatment of socially withdrawn maltreated preschool children: Cultivating natural community resources. *Journal of Clinical Child and Adolescent Psychology*. 2005;34(2):320-325.
26. Webster-Stratton C, Reid J, Hammond M. Social skills and problem-solving training for children with early-onset conduct problems: Who benefits? *Journal of Child Psychology and Psychiatry and Allied Disciplines*. 2001;42(7):943-952.
27. Bierman KL, Sheridan SM, eds. *Volume V: Fostering productive family-school partnerships at school entry: Translating research into practice.* New York: Springer; 2022.

Early Interventions to Improve Peer Relations/Social Competence of Low-Income Children

Patricia H. Manz, PhD, Christine M. McWayne, PhD

Lehigh University, USANew York University, USA

November 2004

Introduction

Social competence is defined as the capacities children possess for developing positive relationships with adults and other children.[1] It is well accepted that children's development in all areas of functioning is influenced by this ability to establish and maintain positive, consistent and primary relationships with adults and peers.[2] Early childhood educators and researchers realize that social competence is a complex, multifaceted area of development and includes skills such as regulating one's emotions, communicating effectively, being able to take the perspective of others, problem-solving and conflict resolution, and developing positive peer relationships.[3]

Subject

For preschool-aged children, managing effective peer relations represents an important developmental task and a primary indicator of school readiness. Child-initiated play during the preschool years provides a dynamic developmental context where this competency is manifest.[4] Studies have highlighted important associations between positive peer play interactions and the development of other competencies indicative of school readiness, such as emergent literacy skills, approaches to learning, and self- regulation.[5,6] For example, through pretend play children develop story-telling and memory abilities that contribute to emergent literacy.[6] Moreover, maintaining effective play interactions with peers requires children to exercise self-control and a host of other important behaviours that can affect learning in school, such as cooperation, attention and persistence.[7,4] Children who develop positive relationships with their peers during the preschool years have a greater likelihood of experiencing positive adjustment in kindergarten, as well as positive social and academic outcomes in the elementary school grades and high school.[8-10]

©2004-2026 ABILIO | PEER RELATIONS

Problems

Conversely, poor peer relations in the early years are associated with detrimental consequences during later developmental periods and adulthood.[11,12] Problems with peers have been linked to lower academic performance, retention, truancy and emotional maladjustment.[13-19] While acceptance from peers helps motivate children to become involved in classroom activities, peer conflict and rejection can suppress children's motivation.[20-22] Low-income children are more likely than their economically advantaged peers to evidence early school difficulties, including behavioural and emotional problems, as well as poor school performance[23,24] and are therefore placed at greater risk for continued difficulties throughout schooling, such as grade retention and school dropout.[25]

Research Context

To date, the most widely used and studied approaches to improve social competence in children involve (a) explicit training in social skills; or (b) teaching children a social problem-solving process for devising prosocial solutions to interpersonal conflicts. Overall, evaluations of social skill-training programs have not demonstrated favourable outcomes, particularly when examining generalization to children's play in natural contexts and social acceptance.[26,27] Although social problem-solving training programs can be effective in enhancing children's awareness of alternative solutions to interpersonal conflict and reducing behaviour problems, these programs do not explicitly promote positive peer play behaviour.[28] Thus, widely available interventions do not sufficiently address the developmentally salient expression of social competency for preschool children's peer play behaviour.

Scant attention is paid to the cultural responsiveness of social competence interventions for low-income youngsters in the research literature.[29] Limited knowledge of the unique interface of culture with children's peer play behaviours is available. Compounding this problem, social competence interventions are primarily developed by experts, who are not members of the early childhood programs or communities in which the intervention is implemented. Thus, the targeted social competencies may not be valued within cultures represented by the children and families.[30] Developing interventions in partnership with stakeholders (e.g., early childhood educators, families), is a promising alternative that provides venues for establishing culturally meaningful and sustainable intervention programs.[31]

In partnership with Head Start, Fantuzzo and colleagues have advanced the application of peer play interventions for low-income preschool children in early childhood education programs.[32] Peer play interventions are embedded in children's natural and routine play opportunities and utilize peers rather than adults as facilitators of children's social-skill acquisition. The Play Buddy intervention involves pairing socially isolated preschoolers (Play Partners) with socially effective preschoolers (Play Buddies) during routine free- play opportunities in the classroom and identifying a family volunteer (Play Supporter) to support the Play Buddy's proactive strategies for engaging the Play Partner. Collectively, the partnership with Head Start staff and families in program development, reliance on the natural contexts for defining and eliciting positive play behaviours, and incorporation of natural helpers in implementing the intervention enrich the relevance of this intervention for children of culturally and socioeconomically diverse backgrounds.

Key Research Questions

The primary challenge for early childhood researchers is attaining knowledge of the interface of diverse cultural values and social competencies. To date, Caucasian, middle-class children are most frequently the focus of intervention research and often represent standards for evaluating appropriate social behaviours.[33] Subsequently, assessment and intervention practices cannot be assumed to be meaningful and effective for children of diverse cultural and socioeconomic backgrounds. Rather, they must be empirically examined for specific populations, exploring culturally responsive ways to develop and provide services. Although the Play Buddy intervention has emerged as an effective intervention for bolstering developmentally salient peer play behaviour among low-income children, the scope for evaluating this program has been on peer play behaviours in the classroom. Future research should expand the focus to examine the effects of acquisition of prosocial peer play behaviour on children's relationships and behaviour in the family and community settings.[34] Furthermore, longitudinal evaluations are needed to document the long-term benefits of the intervention.

Recent Research Results

Traditional approaches for improving social competence have not sufficiently addressed the unique, developmentally salient construct of peer play for preschool children. Moreover, the particular cultural values inherent in low-income and ethnic minority populations of preschool children have been neglected in the development and evaluation of social competence

intervention programs. However, utilizing an innovative approach for developing social competence interventions in partnership with early childhood educators and families, Play Buddy emerges as a promising intervention for low-income preschool children. Randomized field trials have demonstrated the efficacy of this intervention, showing that the improvements in young children's positive peer play interactions generalized to their experiences in the natural classroom environment.[34-35] These findings underscore the importance of embedding interventions within the natural contexts of young children, utilizing familiar adults and children in the implementation of the intervention program and working in partnership to ensure the developmental and cultural relevance of the intervention focus.

Conclusions

The preschool years are crucial for the development of social competencies that will ensure success in school and in later life. Within this developmental period, peer play is a natural and dynamic context for bolstering children's acquisition of important social competencies. Social competence interventions that are interwoven within the meaningful context of play emerge as the most effective means for improving the peer play interactions of children with social competence difficulties. Moreover, developing and implementing interventions in partnership with early childhood educators and children's families enhances their relevance for children representing diverse cultures and socioeconomic backgrounds.

Implications

1. Early childhood educators and families should be involved in the development, selection and implementation of social competence interventions.
2. Research should examine the unique interface of culture and children's play behaviour, informing development of culturally appropriate practices.
3. Knowledge about the importance of play for young children and contexts for eliciting and bolstering peer play should be integrated with educational practices in early childhood programs targeting low-income children, such as Head Start.

References

1. Hart CH, Olsen SF, Robinson CC, Mandleco BL. The development of social and communicative competence in childhood: Review and a model of personal, familial, and extrafamilial processes. In: Burleson BR, Kunkel AW, eds. *Communication yearbook 20*. Thousand Oaks, Calif: Sage Publications; 1997:305-373.

©2004-2026 ABILIO | PEER RELATIONS

2. Sroufe AL, Cooper RG, DeHart GB, Marshall ME, Bronfenbrenner U, eds. *Child development: Its nature and course*. 2nd ed. New York, NY: McGraw-Hill Book Company; 1992.

3. Raver CC, Zigler EF. Social competence: An untapped dimension in evaluating Head Start's success. *Early Childhood Research Quarterly* 1997;12(4):363-385.

4. Bredekamp S, Copple C, eds. *Developmentally appropriate practice in early childhood programs*. Rev. ed. Washington, DC: National Association for the Education of Young Children; 1997.

5. Fisher EP. The impact of play on development: A meta-analysis. *Play & Culture* 1992;5(2):159-181.

6. Shonkoff JP, Phillips DA, eds. *From neurons to neighborhoods: The science of early childhood development*. Washington, DC: National Academy Press; 2000.

7. Pelligrini AD, Galda L. Ten years after: A reexamination of symbolic play and literacy research. *Reading Research Quarterly* 1993;28(2):162-175.

8. Creasey GL, Jarvis PA, Berk LE. Play and social competence. In: Saracho ON, Spodek B, eds. *Multiple perspectives on play in early childhood education. SUNY series, early childhood education: Inquiries and insights*. Albany, NY: State University of New York Press; 1998:116-143.

9. Hampton V. *Validation of the Penn Interactive Peer Play Scale (PIPPS) for urban kindergarten children*. Philadelphia, Pa: University of Pennsylvania; 1999. Unpublished doctoral dissertation.

10. Ladd GW, Kochenderfer BJ, Coleman CC. Friendship quality as a predictor of young children's early school adjustment. *Child Development* 1996;67(3):1103-1118.

11. Ladd GW, Price JM. Predicting children's social and school adjustment following the transition from preschool to kindergarten. *Child Development* 1987;58(5):1168-1189.

12. Denham SA, Holt RW. Preschoolers' likability as cause or consequence of their social behavior. *Developmental Psychology* 1993;29(2):271-275.

13. DeRosier M, Kupersmidt JB, Patterson CJ. Children's academic and behavioral adjustment as a function of the chronicity and proximity of peer rejection. *Child Development* 1994;65(6):1799-1813.

14. Buhs ES, Ladd GW. Peer rejection as antecedent of young children's school adjustment: An examination of mediating processes. *Developmental Psychology* 2001;37(4):550-560.

15. Hartup WW, Moore SG. Early peer relations: Developmental significance and prognostic implications. *Early Childhood Research Quarterly* 1990;5(1):1-17.

16. Kupersmidt JB, Coie JD, Dodge KA. The role of poor peer relationships in the development of disorder. In: Asher SR, Coie JD, eds. *Peer rejection in childhood. Cambridge studies in social and emotional development*. New York, NY: Cambridge University Press; 1990:274-305.

17. Ladd GW, Coleman CC. Children's classroom peer relationships and early school attitudes: Concurrent and longitudinal associations. *Early Education & Development* 1997;8(1):51-66.

18. Ialongo NS, Vaden-Kiernan N, Kellam S. Early peer rejection and aggression: Longitudinal relations with adolescent behavior. *Journal of Developmental & Physical Disabilities* 1998;10(2):199-213.

19. Parker JG, Asher SR. Peer relations and later personal adjustment: Are low-accepted children at risk? *Psychological Bulletin* 1987;102(3):357-389.

20. Birch SH, Ladd GW. Interpersonal relationships in the school environment and children's early school adjustment: The role of teachers and peers. In: Juvonen J, Wentzel KR, eds. *Social motivation: Understanding children's adjustment*. New York, NY: Cambridge University Press; 1996:199-225.

21. Ladd GW, Buhs ES, Seid M. Children's initial sentiments about kindergarten: Is school liking an antecedent of early classroom participation and achievement? *Merrill-Palmer Quarterly* 2000;46(2):255-279.

22. Wentzel KR. Social-motivational processes and interpersonal relationships: Implications for understanding motivation at school. *Journal of Educational Psychology* 1999;91(1):76-97.

23. Duncan GJ, Brooks-Gunn J, Klebanov PK. Economic deprivation and early childhood development. *Child Development* 1994;65(2):296-318.

24. Weiss A, Fantuzzo JW. Multivariate impact of health and caretaking risk factors on the school adjustment of first graders. *Journal of Community Psychology* 2001;29(2):141-160.

25. Alexander KL, Entwisle DR, Dauber SL. Children in motion: School transfers and elementary school performance. *Journal of Educational Research* 1996;90(1):3-12.

26. Odom SL, McConnell SR. *Play time/social time: Organizing your classroom to build interaction skills*. Tucson, Ariz: Communication Skill Builders; 1993.

27. Gresham FM, Sugai G, Horner RH. Interpreting outcomes of social skills training for students with high-incidence disabilities. *Exceptional Children* 2001;67(3):331-344.

28. Shure MB. I can problem solve (ICPS): Interpersonal cognitive problem solving for young children. *Early Child Development and Care* 1993;96:49-64.

29. Roopnarine JL, Lasker J, Sacks M, Stores M. The cultural contexts of children's play. In: Saracho ON, Spodek B, eds. *Multiple perspectives on play in early childhood education*. Albany, NY: State University of New York Press; 1998:149-219.

30. Fantuzzo J, Coolahan KC, Weiss A. Resiliency partnership-directed intervention: Enhancing the social competencies of preschool victims of physical abuse by developing peer resources and community strengths. In: Cicchetti D, Toth SL, eds. *Developmental perspectives on trauma: Theory, research, and intervention*. Rochester, NY: University of Rochester Press; 1997:463-489.*Rochester symposium on developmental psychology*; vol. 8.

31. Nastasi BK, Varjas K, Schensul SL, Silva KT, Schensul JJ, Ratnayake P. The Participatory Intervention Model: A framework for conceptualizing and promoting intervention acceptability. *School Psychology Quarterly* 2000;15(2):207-232.

32. Fantuzzo JW, Atkins MS. *Resilient peer training: A community-based treatment to improve the social effectiveness of maltreating parents and preschool victims of physical abus*. Washington, DC: National Center on Child Abuse and Neglect; 1995. Publication No. 90-CA-147103.

33. Fantuzzo JW, McWayne C, Cohen HL. Peer play in early childhood. In: Fisher CB, Lerner RM, eds. *Applied developmental science: An encyclopedia of research policies and programs*. Thousand Oaks, Calif: Sage; In press.

34. Fantuzzo JW, Manz PH, Atkins M, Meyers R. Peer-mediated treatment of socially withdrawn maltreated preschooler: Cultivating natural community resources. *Journal of Clinical Child and Adolescent Psychology*. In press.

35. Fantuzzo JW, Sutton-Smith B, Atkins M, Meyers R, Stevenson H, Coolahan K, Weiss A, Manz PH. Community-based resilient peer treatment of withdrawn maltreated preschool children. *Journal of Consulting and Clinical Psychology* 1996;64(6):1377-1386.

©2004-2026 ABILIO | PEER RELATIONS

Peer-related Social Competence for Young Children with Disabilities

Samuel L. Odom, PhD

Indiana University, USA

January 2005

Introduction

The development of social relationships with peers is a major achievement of the preschool years. For some children with disabilities (e.g. developmental delay, autism, mental retardation, emotional/behavioural disorder), acquiring the skills and knowledge necessary for interacting positively and successfully with peers is a challenge. Leaders in the field propose that the development of peer-related social competence should be a primary goal of early intervention and early childhood programs.[1] For many young children with disabilities, practitioners need to develop individualized educational plans that include social competence goals.[2] To reach these programmatic and individual goals, specific teaching/intervention strategies are necessary.

Subject

When young children with disabilities are placed in inclusive settings, teachers and parents report that many children do develop friendships with their typically developing peers.[3] Yet, for those children with disabilities who are socially rejected by their peers, such friendships rarely develop. Peer social relations are based on children's competent participation in social interactions. Such peer-related social competence is often defined as children engaging in behaviours that meet the social goals of the child and that are appropriate for the social context.[4] As a group, children with disabilities consistently perform less well socially than do typically developing peers.[5] A consistent finding in the literature is that children with disabilities, when compared to typically developing children of similar ages, interact with peers less often and are less well accepted.[6] Social acceptance and indices of peer-related social competence are associated with the type of disability and characteristics of individual children. Children with communication disorders who do have some communication skills are relatively well accepted.[7,8,9] Conversely, children with disabilities who have aggressive behaviour, very limited or no communication skills, limited social skills, and/or limited motor skills are often socially rejected

©2004-2026 ABILIO | PEER RELATIONS

by their peer group.[8,9] Moreover, children not formally identified as having disabilities but who share the characteristics just noted are considered at risk for social rejection by their peers and are candidates for social skills interventions.

Problems

For children with disabilities who are socially rejected, systematic instructional programs or intervention procedures are necessary. Most young children learn prosocial skills through the natural process of observing and engaging in social interactions with socially competent peers. Socially rejected children with disabilities may not have the opportunity to engage in such rich and essential learning experiences. Their access to socially competent peers may be limited by a) placement in settings with few socially competent peers (e.g. special education classrooms including only other students with disabilities); or b) the absence of the entry skills needed for engaging in even simple social interaction and play with socially competent peers.[10] The foci of intervention programs are to arrange the social group setting and/or to teach the social skills necessary for engaging in the rich, naturally occurring learning opportunities that exist in social participation with the peer group.

Research Context

Contexts for research are both procedural and methodological. A key feature in the procedural dimension of research on interventions to promote social relationships is the presence of peers who are typically developing and socially competent. That is, intervention effects are stronger when children with disabilities are in settings with typically developing peers.[11,12] Intervention effects are limited when interventions occur outside of this naturally occurring context for social competence interventions.

Methodological and logistic constraints (e.g. levels of funding available, low prevalence of some types of disabilities) have limited the use of randomized experimental group designs in research on peer-related social competence interventions. Instead, investigators have employed single-subject research methods, which depend on documentation of treatment effects within subjects and replication across studies.[13] Also, researchers have used quasi-experimental designs in their analyses.[14] These designs generate a moderate degree of evidence for the effectiveness of intervention methods, and the strength of evidence is built through replications across studies.

Key Research Questions

Primary research questions focus on the efficacy of individual intervention approaches for promoting peer-related social competence of young children with disabilities. Addressing this primary question is complicated by the heterogeneity existing in the population, so more refined research questions are necessary for determining which intervention approach works for which types of children (e.g. children with communication disorders, autism, behaviour disorders). Questions regarding effectiveness (i.e. do intervention procedures work when they are "scaled up" for use in a wide range of natural settings) have generally not been addressed because they depend on a solid basis of efficacy research.

Recent Research Results

Intervention approaches may be aligned according to their degree of intensity.[10,15] Intensity refers to the amount of time needed to implement the intervention, accommodations to a regular classroom routine, and the degree of specialized training required. Intervention approaches with evidence of efficacy, in ascending order of intensiveness, include:

- Inclusion in early childhood settings with typically developing peers;[3]
- Classroom-wide intervention procedures designed to promote prosocial skills for all children and prevent behaviour problems from occurring;[16,17,18]
- Naturalistic interventions such as group friendship activities;[19,20,21]
- Social integration activities in which structured play groups are formed in inclusive classrooms and facilitated by teachers;[21,22]
- Explicit skills training in which children learn prosocial skills in small groups[23] or peer-mediated approaches involving peers as facilitators.[24,25,26]

Conclusions

The intervention approaches just described all have moderate to strong evidence of efficacy for children with disabilities or children at risk for social rejection. Efficacy outcomes are most often reflected in increased participation in social interaction with peers outside the intervention setting or when treatment is withdrawn;[24,25,26] the development of friendships when children participate in inclusive programs;[3,9] decreased aggression toward others;[16] positive changes on multiple measures of social competence;[12] and reduced referral to special education placements.[18]

In addition, some studies have examined the maintenance of changes in social competence months or years after the intervention programs have ended.[12,18,27] To date, there have been few longitudinal studies of changes in social-emotional development that result from specific interventions that promote immediate or short-term changes in the social competence of children with disabilities. The exception to this general rule is research on prevention of conduct disorders and antisocial behaviour, where there is some evidence that early prevention curricula do have longitudinal effects.[17,18]

Implications

For many children with disabilities, systematic and individually planned interventions or teaching strategies are necessary to promote peer-related social competence and social relationships with peers. The research literature documents the immediate and short-term effects of these interventions on children's social competence. A key feature that determines the success of these interventions is access to a socially competent peer group, and the policy implication is that inclusive programs should be the educational placement of choice for young children with disabilities. A variety of models exist for providing inclusive educational experience.[28] Intervention approaches also vary in intensity, with children having the greatest needs requiring the most intensive interventions. The policy and practical implication is that, relative to the less intense interventions, more intensive interventions will require a greater amount of time, training, administrative support and accommodations in classroom settings.

References

1. Guralnick MJ. A framework for change in early childhood inclusion. In: Guralnick MJ, ed. *Early childhood inclusion: Focus on change*. Baltimore, MD: Brookes Publishing Co.; 2001:3-35.
2. Odom SL, Zercher C, Marquart J, Li S, Sandall SR, Wolfberg PJ. Social relationships of children with disabilities and their peers in inclusive preschool classrooms. In: Odom SL, ed. *Widening the circle: Including children with disabilities in preschool programs*. New York, NY: Teachers College Press, Columbia University; 2001:61-80.
3. Buysse V, Goldman BD, Skinner ML. Setting effects on friendship formation among young children with and without disabilities. *Exceptional Children* 2002;68(4):503-517.
4. Guralnick MJ. A hierarchical model for understanding children's peer-related social competence. In: Odom SL, McConnell SR, McEvoy MA, eds. *Social competence of young children with disabilities: issues and strategies for intervention*. Baltimore, Md: P.H. Brookes Publishing Co.; 1992:37-64.
5. McConnell SR, Odom SL. A multimeasure performance-based assessment of social competence in young children with disabilities. *Topics in Early Childhood Special Education* 1999;19(2):67-74.
6. Guralnick MJ, Connor RT, Hammond MA, Gottman JM, Kinnish K. Immediate effects of mainstreamed settings on the social interactions and social integration of preschool children. *American Journal on Mental Retardation* 1996;100(4):359-377.

©2004-2026 ABILIO | PEER RELATIONS

7. Guralnick MJ, Connor RT, Hammond MA, Gottman JM, Kinnish K. The peer relations of preschool children with communication disorders. *Child Development* 1996;67(2):471-489.

8. Harper LV, McCluskey KS. Caregiver and peer responses to children with language and motor disabilities in inclusive preschool programs. *Early Childhood Research Quarterly* 2002;17(2):148-166.

9. Odom SL, Zercher C, Li S, Marquart J, Sandall S. *Social acceptance and social rejection of young children with disabilities in inclusive classes*. Manuscript submitted for publication.

10. Odom SL, Brown WH. Social interaction skill training for young children with disabilities in integrated settings. In: Peck C, Odom S, Bricker D, eds. *Integrating young children with disabilities into community-based programs: From research to implementation*. Baltimore, Md: P.H. Brookes Publishing Co.; 1992:39-64.

11. Strain PS. Generalization of autistic children's social behavior change: Effects of developmentally integrated and segregated settings. *Analysis and Intervention in Developmental Disabilities* 1983;3(1):23-34.

12. Odom SL, McConnell SR, McEvoy MA, Peterson C, Ostrosky M, Chandler LK, Spicuzza RJ, Skellenger A, Creighton M, Favazza PC. Relative effects of interventions supporting the social competence of young children with disabilities. *Topics in Early Childhood Special Education* 1999;19(2):75-91.

13. Horner R, Carr E, Halle J, McGee G, Odom S, Wolery M. The use of single subject research to identify evidence-based practice in special education. *Exceptional Children*. In press.

14. Gersten R, Compton D, Coyne M, Fuchs LS, Greenwood C, Innocenti M. Quality indicators for group experimental and quasi-experimental design. *Exceptional Children*. In press.

15. Brown WH, Odom SL, Conroy MA. An intervention hierarchy for promoting young children's peer interactions in natural environments. *Topics in Early Childhood Special Education* 2001;21(3):162-175.

16. Webster-Stratton C, Reid MJ, Hammond M. Preventing conduct problems, promoting social competence: A parent and teacher training partnership in Head Start. *Journal of Clinical Child Psychology* 2001;30(3):283-302.

17. Kam CM, Greenberg MT, Kusche CA. Sustained effects of PATHS curriculum on the social and psychological adjustment of children in special education. *Journal of Emotional and Behavioral Disorders* 2004;12(2):66-78.

18. Tremblay RE, Pagani-Kurtz L, Vitaro F, Masse LC, Pihl RO. A bimodal preventive intervention for disruptive kindergarten boys: Its impact through mid-adolescence. *Journal of Consulting and Clinical Psychology* 1995;63(4):560-568.

19. Brown WH, Ragland EU, Fox JJ. Effects of group socialization procedures on the social interactions of preschool children. *Research in Developmental Disabilities* 1988;9(4):359-376.

20. McEvoy MA, Nordquist VM, Twardosz S, Heckaman KA, Wehby JH, Denny RK. Promoting autistic children's peer interaction in an integrated early childhood setting using affection activities. *Journal of Applied Behavior Analysis* 1988;21(2):193-200.

21. Frea W, Craig-Unkefer L, Odom SL, Johnson D. Differential effects of structured social integration and group friendship activities for promoting social interaction with peers. *Journal of Early Intervention* 1999;22(3):230-242.

22. Jenkins JR, Odom SL, Speltz, ML. Effects of social integration on preschool children with handicaps. *Exceptional Children* 1989;55(5):420-428.

23. McConnell SR, Sisson LA, Cort CA, Strain PS. Effects of social skills training and contingency management on reciprocal interaction of preschool children with behavioral handicaps. *Journal of Special Education* 1991;24(4):473-495.

24. Goldstein H, English K, Shafer K, Kaczmarek L. Interaction among preschoolers with and without disabilities: Effects of across-the-day peer intervention. *Journal of Speech, Language, and Hearing Research* 1997;40(1):33-48.

25. Odom SL, Chandler LK, Ostrosky M, McConnell SR, Reaney S. Fading teacher prompts in peer-initiation interventions for young children with disabilities. *Journal of Applied Behavior Analysis* 1992;25(2):307-317.

26. Strain PS, Shores RE, Timm MA. Effects of peer social initiations on the behavior of withdrawn preschool children. *Journal of Applied Behavior Analysis* 1977;10(2):289-298.

27. Reid MJ, Webster-Stratton C, Hammond M. Follow-up of children who received the Incredible Years Intervention for Oppositional Defiant Disorder: Maintenance and prediction of 2-year outcomes. *Journal of Abnormal Child Psychology*. In Press.

28. Odom SL, Horn EM, Marquart J, Hanson MJ, Wolfberg P, Beckman P, Lieber J, Li SM, Schwartz I, Janko S, Sandall S. On the forms of inclusion: Organizational context and individualized service models. *Journal of Early Intervention* 1999;22(3):185-199.

Promoting Young Children's Peer Relations: Comments on Odom, Manz and McWayne, and Bierman and Erath

Michael J. Guralnick, PhD

University of Washington, USA

January 2005

Introduction

Establishing relationships with peers constitutes one of the most important and challenging developmental tasks of early childhood. These relationships not only make an important contribution to current and future interpersonal well-being, but also promote various other aspects of development.[1] Children must draw upon all of their developmental resources to establish the social-information and emotion-regulation processes that enable them to function in a socially competent manner with peers.[2] Yet this developmental task is highly vulnerable to disruption. Disruptions in any developmental domain (e.g., cognitive, affective) or difficult family circumstances (e.g., poverty, maternal depression) are likely to affect relevant processes and interfere with the proper development of peer-related social competence and, in turn, adversely affect the quality of relationships with peers.[3] In contrast to parents and other supportive adults, the fact that a child's peers will readily detect peer competence difficulties in others and respond accordingly (through rejection, ignoring or avoidance) potentially creates a cycle of difficult relationships for vulnerable children. The challenge for our field is to understand the diverse and complex forces influencing children's peer-related social competence and to utilize this knowledge to develop appropriate prevention and intervention programs.

Each of the authors of the papers addressing peer relations has provided important perspectives on this issue. Manz and McWayne focus on the special problems facing low-income children; Bierman and Erath inform us about a range of program models to promote children's socio-emotional development; and Odom considers the special problems of young children with disabilities. Taken together, these articles provide a thoughtful summary of the state-of-the-art of young children's peer relationships and encourage the field to address this complex problem.

Research and Conclusions

In their paper on interventions to improve the peer relationships of low-income children, Manz and McWayne present a compelling argument for giving high priority to this area of development. They also correctly point out the failures of many intervention efforts, whether didactic or more cognitive in orientation, to produce desired effects. The failure to achieve generalization of skills to different and more natural settings is highlighted.

For many low-income preschool children, Manz and McWayne suggest that this situation can be improved by creating interventions more sensitive to the cultural backgrounds and goals of children. This is an important point, rarely considered by the field. They also suggest that a combination of partnerships with key individuals (e.g. parents) formed to create culturally meaningful intervention approaches and thoughtfully utilizing the abilities of other more skilled children can be of value. Their suggestion to involve families is critical, especially given increasing knowledge of family-peer linkages.[4] Early results support their position. Yet when interventions involving more socially skilful peers are carried out in natural contexts, care must be taken not to create an irregular relationship between children: one that is not compatible with the egalitarian nature of peer relationships.[5,6] Moreover, to complement this approach, it is important to consider the needs of these young low-income children in an even broader developmental and ecological context. Clusters of family characteristics can increase the risk of poor peer relationships by creating stressors that are non-optimal for development in this area.[3] Sensitive assessments can identify these stressors and lead to the development of comprehensive family/community and child interventions.

The article by Bierman and Erath asks the field to think broadly about programs to promote the socio-emotional development of preschool-age children. They make the important distinction between universal programs designed to promote socio-emotional competencies intended for all children, and programs designed for children at risk or those already exhibiting problems in this area of development. Both universal programs and those targeted to children at risk for socio-emotional problems are preventive in nature, whereas those programs focusing on children already exhibiting peer relationship problems are best conceptualized in the context of early intervention. Clearly, this important organizational suggestion presents a major challenge to our educational and related service systems. The costs and benefits for implementing universal programs must be analyzed, and risk factors must be carefully identified in a developmentally and culturally appropriate manner.[7] As these authors point out, numerous research questions remain unanswered that can inform educational and clinical practice. Important intervention

research on aggression and peer rejection has been carried out,[8] but additional randomized clinical trials are desperately needed, especially for preventive interventions involving young children.[9] This is equally true for children whose peer competence problems are less apparent, such as socially withdrawn preschoolers. Once again, key issues focus on the generalization of outcomes and the importance of comprehensive programs, including those involving parents.

Odom's article thoughtfully orients us to the numerous problems children with disabilities experience in developing appropriate social skills and competencies as well as establishing friendships. An important point that Odom makes is that it is essential for our field to recognize the enormous diversity of this group of children with identified disabilities. To better understand this variability requires attention to programs focusing on carefully identified subgroups of children. Yet the absence of randomized clinical trials for most subgroups of children with disabilities and the inherent limitations of single-subject research designs in this area make firm conclusions regarding effectiveness difficult to draw at this time. Nevertheless, as Odom points out, there are many encouraging findings. Odom also suggests that interventions to promote competence with peers and to support friendships are best carried out in the context of inclusive programs. This makes good sense from a philosophical perspective, as well as reflecting the fact that typically developing children are able to stimulate a higher level of social interaction on the part of children with disabilities.[10] At the same time, however, improving the peer-related social competence of young children with disabilities (as opposed to increasing their levels of social interaction) has been more elusive. A broader developmental-ecological orientation may well be needed for the substantial number of children with disabilities experiencing peer competence problems. A knowledge base drawn from the developmental science of normative development and the developmental science of risk and disability now exists to permit meaningful randomized clinical trials for subgroups of children with disabilities. Preliminary evidence suggests the value and feasibility of such an approach.[11]

Implications for Development and Services

These three articles on children's peer relations have done a masterful job in highlighting the importance of this domain of development in children's lives, the many problems encountered by young children in developing competencies that allow them to establish meaningful relationships with their peers, and the prospects for designing and implementing effective prevention and intervention programs. This awareness makes it abundantly clear that our field must devote far more of its intellectual and material resources to this domain of development. Substantive

systems issues must be addressed to design community-based service programs that are valued from a prevention perspective, as well as more intensive programs for those exhibiting peer interaction difficulties. Measurement, identification of at-risk children, program design and implementation issues are considerable, as are the many practical and resource problems that exist in terms of embedding these programs in the early childhood system. An awareness of the critical role of families presents an additional challenge, as comprehensiveness is a critical element for success. Accordingly, systems of services may well benefit from the establishment of a general developmental framework that is applicable to children with and without disabilities; one that fully recognizes the broad ecological influences on children's peer relations and the social-information and emotion regulation processes that are relevant. Within this framework, critical research questions can be addressed utilizing an array of methodologies that will ultimately bring about both feasible and effective prevention and intervention programs to promote children's peer relations.

References

1. Rubin KH, Coplan RJ, Nelson LJ, Cheah CSL, Lagace-Seguin DG. Peer relationships in childhood. In: Bornstein MH, Lamb ME, eds. *Developmental psychology: An advanced textbook*.4th ed. Mahwah, NJ: Lawrence Erlbaum Associates; 1999:451-501.
2. Guralnick MJ. Family and child influences on the peer-related social competence of young children with developmental delays. *Mental Retardation & Developmental Disabilities Research Reviews* 1999;5(1):21-29.
3. Guralnick MJ, Neville B. Designing early intervention programs to promote children's social competence. In: Guralnick MJ, ed. *The effectiveness of early intervention*. Baltimore, Md: P.H. Brookes; 1997:579-610.
4. Ladd GW, Pettit GS. Parenting and the development of children's peer relationships. In: Bornstein MH, ed. *Practical issues in parenting*. 2nd ed. Mahwah, NJ: Lawrence Erlbaum Associates; 2002:269-309. *Handbook of parenting*; vol 5.
5. Hartup WW, Sancilio MF. Children's friendships. In: Schopler E, Mesibov GB, eds. *Social behavior in autism*.New York, NY: Plenum Press; 1986:61-79.
6. Hartup WW. The company they keep: Friendships and their developmental significance. *Child Development* 1996;67(1):1-13.
7. Bennett KJ, Lipman EL, Racine Y, Offord DR. Do measures of externalising behaviour in normal populations predict later outcome?: Implications for targeted interventions to prevent conduct disorder. *Journal of Child Psychology & Psychiatry & Allied Disciplines* 1998;39(8):1059-1070.
8. Bierman KL. *Peer rejection: developmental processes and intervention strategies*. New York, NY: Guilford Press; 2004.
9. Domitrovich CE, Greenberg MT. Preventive interventions with young children: Building on the foundation of early intervention programs. *Early Education and Development* 2004;15(4):365-370.
10. Guralnick MJ, Connor RT, Hammond, M, Gottman JM, Kinnish K. Immediate effects of mainstreamed settings on the social interactions and social integration of preschool children. *American Journal on Mental Retardation* 1996;100(4):359-377.
11. Guralnick MJ, Connor RT, Neville B, Hammond MA. *Promoting the peer-related social development of young mildly delayed children: Effectiveness of a comprehensive intervention*. Under review.

Social Skills Intervention and Peer Relationship Difficulties in Early Childhood: Comments on Bierman and Erath, Manz and McWayne, and Odom

Jacquelyn Mize, PhD

Auburn University, USA

July 2005

Introduction

Watching any group of preschool children, it is obvious to the observer that most reap great joy from playing with their peers.[1] For a few children, though, peer relationships are already challenging and not much fun because they are withdrawn from or rejected by their age mates. Having nobody to play with makes children miserable, but having peer relationship problems is significant for another reason. Children who do not form positive peer relationships are more likely to have problematic relationships later on.[2,3] The predictive power of early peer relationships seems to derive, at least in part, from a transactional social system[4] in which early difficulties become exacerbated and early competencies become strengthened. Early in the year, preschoolers who play cooperatively with peers become better liked over time,[5] whereas preschoolers who engage in aversive behaviour with peers subsequently become rejected and victimized.[4,6] Children tend to affiliate with peers with whom they share interests and behavioural characteristics, and peers then reinforce these patterns of behaviour.[7] Thus, it makes sense to offer programs to enhance children's peer relationships and social skills during the preschool years.

There are a number of additional reasons to initiate interventions to improve children's social skills during the preschool years. Many models of development suggest that early intervention, compared to intervention at older ages, holds special promise because developmental trajectories are most malleable early in life.[8] This malleability exists both within the child and within the child's relationships. Entry to formal schooling after preschool may act as a switch point, a time of reorganization with opportunities to renegotiate trajectories.[9,10] Children who have not developed social skills during preschool may become further marginalized in kindergarten and associate with other marginalized peers, so that deviant patterns are

©2004-2026 ABILIO | PEER RELATIONS

strengthened and the risks of developing more serious problems in later childhood and adolescence increase. Although problems in adolescence may seem far removed from the preschool playground, follow-up of early intervention programs indicates that they can have long-term positive effects that may not be clear until children reach adolescence.[11] Finally, promoting social competence is a prime mission of early childhood education.[12] This mission is endorsed by kindergarten teachers, who more often identify social competencies, rather than academic skills, as central to school readiness.[13] Thus, social skills intervention is consistent with the culture and goals of early childhood education settings.[12]

Research and Conclusions

Bierman and Erath, Manz and McWayne, and Odom describe three empirically validated approaches to social skills enhancement that can be integrated into preschool classrooms. The approach described by Bierman and Erath is grounded in assumptions that children with poor peer relationships lack one or more "competence correlates," social-cognitive, emotional and behavioural skills necessary for successful social interaction, and that these skills can be taught through direct instruction and practice. The competence correlates (or, in evaluation research terminology, intermediate objectives[14]) are crucial in planning social skill curricula. These authors also outline critical instructional components of interventions, including repeated practice of new skills and explicit support to generalize the new skills to the peer context. Preschool children do not spontaneously transfer even simple skills learned in one context to another nearly identical context;[15] most young children need explicit instruction to try new social skills in a different context (e.g. the classroom). This may require an adult coach or a socially competent peer partner who stays near the child in the classroom and prompts skill use.[16] It may also require the cooperation of classroom peers who agree to accept the target child's early play bids.

Bierman and Erath suggest that programs for children who are already exhibiting delays or problems in peer relationships (i.e. indicated programs), be nested within programs aimed at all children (i.e. universal programs). The advantage to a nested approach is not only, as Bierman and Erath suggest, that it would provide all children and families with services commensurate with their needs, but also that implementing a universal program could change the culture of the classroom, making all children more receptive to and supportive of nascent social skills and friendship bids from targets of the indicated program.

Manz and McWayne also stress the importance of the play context and play skills, but highlight challenges to making the targeted social skills culturally relevant in programs serving low-

income or ethnic-minority families. The Play Buddy approach (also referred to as Resilient Peer Treatment or RPT) has been used with socially withdrawn, maltreated preschoolers.[17,18] Socially competent preschoolers are taught to initiate play with the withdrawn targets of the intervention; adult volunteers prompt the child, acting as coach when needed. Community notions of socially competent behaviour would naturally be incorporated in such embedded interventions. Moreover, learning skills in the classroom obviates the need for explicit encouragement to generalize new behaviour to a different setting. Fantuzzo and colleagues[17,18] report increases in observed peer interactive play and decreases in solitary play for treatment children in a randomized control trial, with improvements maintained at a two-month follow-up. There is a wide variation in the sorts of skill or behavioural deficits preschoolers with peer relationship problems experience, and it isn't clear which groups would benefit from a peer partner approach. Some preschoolers with significant social-cognitive, emotional or behavioural deficits may need direct instruction and practice, in combination with peer partner play.

Odom argues that children with special needs usually require help and support to develop social skills for peer interaction. Children with disabilities are often segregated from typically developing peers by placement in special classrooms, through peer rejection, or both. Both types of segregation deprive disabled children of opportunities to learn interaction skills and peer group norms — learning that is essential for peer acceptance. Interventions for children with disabilities are more powerful, according to Odom, when they take place in groups of typically developing peers. In a childhood culture in which any difference is grounds for teasing and exclusion, children with disabilities can face brutal treatment even if they have age-appropriate social skills. Thus, it would make sense, in addition to offering social skills intervention to children who need it, to also engineer changes in the classroom and school culture that would make hurtful acts less acceptable and acts of kindness more valued. Such an approach has been used in the PeaceBuilders universal violence prevention program[19] and the "You Can't Say You Can't Play" curriculum, a classroom-focused intervention designed to reduce peer exclusion in kindergarten.[20]

The research reviewed in these three papers provides a good overview of the rationale for and approaches to enhancing the social skills of preschool children. A number of significant questions were not addressed in these papers, however; many of these don't yet have clear answers but deserve the attention of researchers. Among the most important, both theoretically and practically, is what changes when, as a result of social skills intervention, children develop better peer relationships. Bierman and Erath, in their list of competence correlates, offer a set of likely

candidates that can serve as both a guide for program development and a map for assessing intermediate objectives. By documenting changes in behavioural, emotional and cognitive processes that occur during intervention and are correlated with improvements in peer relationships, more effective and efficient interventions can be developed. In an assessment of the effects of a social skills intervention for preschoolers, Mize and Ladd found that treatment-group children showed increases in knowledge of appropriate social strategies after training, and that improvements in social knowledge were correlated with increases in social skill use in classroom interactions with peers.[16] These data suggest that social strategy instruction in this intervention was effective and responsible, at least in part, for positive behaviour change. Research that documents the mechanisms of change during interventions will allow program developers to focus on the most critical components for future work.

Implications for Services

Most preschool teachers feel ill-prepared to handle the challenging behaviour of many young children.[21] For teachers, administrators and others who provide direct services to young children, the most critical and unanswered questions are practical: How is a social skills intervention carried out, and who will do it? Manz and McWayne offer one set of answers for these questions in their description of the Play-Buddy intervention: socially competent peers and family volunteers work with target children in an area of the regular classroom. However, other models of social skills intervention require more materials, planning and special training. Fortunately, there are now social skills programs developed or adapted for preschoolers, programs that are grounded in empirical research, have demonstrated efficacy, and are available commercially[22,23,24] or described in accessible publications.[25,26] These programs capitalize on the fact that young children respond to active learning experiences, using play, video, puppets and role play to engage children.

Unfortunately, even with the availability of commercial products, there are obstacles to providing social skills programs to the large numbers of preschool-aged children who may benefit. In both the United States and Canada, preschool education consists of a fragmented patchwork of programs with no national regulatory agency, organizational framework or support system.[27] Most preschool programs are under-funded and staffed by teachers who are poorly trained and poorly paid.[27,28] This situation can be contrasted with that in public schools. Public schools are linked through state or provisional government organizations so that information, curricula and policies can be quickly disseminated to programs serving large proportions of children in a given

area. Reaching large numbers of preschool care-providers with information and training about young children's social competence would be difficult, yet it should be a priority. The importance of training is illustrated by findings from Greenberg and colleagues showing that positive changes in children's behaviour as a result of implementing the PATHS social skills intervention were correlated in the .3 to .4 range with ratings of the quality with which teachers implemented the curriculum.[29] Thus, an important challenge for policy-makers is how to disseminate information, training and social skills curricula in the vast, loosely connected patchwork of programs serving preschool-aged children.

References

1. Gottman JM. The world of coordinated play: Same- and cross-sex friendship in young children. In: Gottman JM, Parker JG, eds. *Conversations of friends: Speculations on affective development. Studies in emotion and social interaction*. New York, NY: Cambridge University Press; 1986:139-191.
2. Howes C. Peer interaction of young children. *Monographs of the Society for Research in Child Development* 1988;53(1).
3. Ladd GW, Price JM. Predicting children's social and school adjustment following the transition from preschool to kindergarten. *Child Development* 1987;58(5):1168-1189.
4. Olson SL. Development of conduct problems and peer rejection in preschool children: A social systems analysis. *Journal of Abnormal Child Psychology* 1992;20(3):327-350.
5. Ladd GW, Price JM, Hart CH. Predicting preschoolers' peer status from their playground behaviors. *Child Development* 1988;59(4):986-992.
6. Snyder J, Horsch E, Childs J. Peer relationships of young children: Affiliative choices and the shaping of aggressive behavior. *Journal of Clinical Child Psychology* 1997;26(2):145-156.
7. Cairns RB, Cairns BD, Neckerman HJ, Gest SD, Gariepy JL. Social networks and aggressive behavior: Peer support or peer rejection? *Developmental Psychology* 1988;24(6):815-823.
8. Shonkoff JP, Phillips DA, eds. *From neurons to neighborhoods: The science of early childhood development*. Washington, DC: National Academy Press; 2000.
9. Dodge KA, Pettit GS. A biopsychosocial model of the development of chronic conduct problems in adolescence. *Developmental Psychology* 2003;39(2):349-371.
10. Lewis MD. Trouble ahead: Predicting antisocial trajectories with dynamic systems concepts and methods. *Journal of Abnormal Child Psychology* 2004;32(6):665-671.
11. Tremblay RE, Pagani-Kurtz L, Vitaro F, Masse LC, Pihl RO. A bimodal preventive intervention for disruptive kindergarten boys: Its impact through mid-adolescence. *Journal of Consulting and Clinical Psychology* 1995;63(4):560-568.
12. Hendrick J. *Total learning: Developmental curriculum for the young child*. Columbus, NY: Merrill Pub.; 1990.
13. Lewit EM, Schuurmann-Baker L. School readiness. *The Future of Children* 1995;5(2):128-139. Available at: http://www.futureofchildren.org/usr_doc/vol5no2ART9.pdf. Accessed April 13, 2005.
14. Berk RA, Rossi PH. *Thinking about program evaluation*. 2nd ed. Thousand Oaks, Calif: Sage Publications; 1999.
15. Flavell JH, Miller PH, Miller SA. *Cognitive development*. 3rd ed. Englewood Cliffs, NJ: Prentice Hall; 1993.

©2004-2026 ABILIO | PEER RELATIONS

16. Mize J, Ladd GW. A cognitive-social learning approach to social skill training with low-status preschool children. *Developmental Psychology* 1990;26(3):388-397.

17. Fantuzzo JW, Jurecic L, Stovall A, Hightower AD, Goins C, Schachtel D. Effects of adult and peer social initiations on the social behavior of withdrawn, maltreated preschool children. *Journal of Consulting and Clinical Psychology* 1988;56(1):34-39.

18. Fantuzzo J, Sutton-Smith B, Atkins M, Meyers R, Stevenson H, Coolahan K, Weiss A, Manz P. Community-based resilient peer treatment of withdrawn maltreated preschool children. *Journal of Consulting and Clinical Psychology* 1996;64(6):1377-1386.

19. Flannery DJ, Vazsonyi AT, Liau AK, Guo S, Powell KE, Atha H, Vesterdal W, Embry D. Initial behavior outcomes for the PeaceBuilders universal school-based violence prevention program. *Developmental Psychology* 2003;39(2):292-308.

20. Harrist AW, Bradley KD. "You can't say you can't play:" Intervening in the process of social exclusion in the kindergarten classroom. *Early Childhood Research Quarterly* 2003;18(2):185-205.

21. Webster-Stratton C, Reid MJ, Hammond M. Preventing conduct problems, promoting social competence: A parent and teacher training partnership in Head Start. *Journal of Clinical Child Psychology* 2001;30(3):283-302.

22. Webster-Stratton C. The Incredible Years training series. *Juvenile Justice Bulletin* 2000;June. Available at: http://www.ncjrs.org/html/ojjdp/2000_6_3/contents.html. Accessed April 14, 2005.

23. The PATHS curriculum for preschool. Available at: http://www.channing-bete.com/positiveyouth/pages/PATHS/PATHS-preschool.html. Accessed April 14, 2005.

24. The Incredible Years curriculum for preschool. Available at: http://www.incredibleyears.com. Accessed April 14, 2005.

25. Mize J. Coaching preschool children in social skills: A cognitive-social learning curriculum. In: Cartledge G, Milburn JF, eds. *Teaching social skills to children and youth: innovative approaches*. Boston, Mass: Allyn and Bacon; 1995:197-236.

26. Katz LG, McClellan DE. *Fostering children's social competence: the teacher's role*. Washington, DC: National Association for the Education of Young Children; 1997.

27. OECD. *Early Childhood Education and Care Policy - Canada - Country Note*. Paris, France: OECD; 2004. Available at: http://www.oecd.org/dataoecd/42/34/33850725.pdf. Accessed April 14, 2005.

28. Vandell DL, Wolfe B. *Child care quality: Does it matter and does it need to be improved?* Washington, DC: US Department of Health and Human Services; 2000. Available at: http://aspe.hhs.gov/hsp/ccquality00/index.htm. Accessed April 14, 2005.

29. Kam CM, Greenberg MT, Kusché CA. Sustained effects of the PATHS curriculum on the social and psychological adjustment of children in special education. *Journal of Emotional and Behavioral Disorders* 2004;12(2):66-78.