

ANXIETY AND DEPRESSION

Young Children's Peer Relations: Links with Early Developing Anxiety and Depression

¹Robert J. Coplan, PhD, ²Laura L. Ooi, PhD

¹Department of Psychology, Carleton University, Ottawa, Canada, ²Public Health Agency of Canada, Ottawa, Canada

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Introduction

The peer group represents an important and unique context for the development of a wide range of skills and competencies in early childhood.¹ Simply stated, ‘playing with friends’ helps young children acquire and practice social (e.g., resolving conflicts), cognitive (e.g., perspective-taking), emotional (self-regulation) and communicative skills that provide foundations for their subsequent development. However, for many young children, the peer group also represents the first setting where the earliest signs of internalizing problems (such as anxiety and depression) are manifested. In the peer group, anxious children may experience feelings of fear, worry, uneasiness, and self-consciousness. Symptoms of depression in the early childhood peer group may include anhedonia (inability to experience pleasure), excessive guilt, and changes in appetite and activity levels.^{2,3,4} Of note, symptoms of anxiety and depression can often co-occur.^{5,6}

Problems

Research exploring links between internalizing problems and peer relations in early childhood typically rely on parent and teacher reports, and less frequently on naturalistic observations. Parents and teachers have the advantage of being able to observe children's behaviours across a wide range of time and contexts but may also bring biases to their responses.⁷ Observations provide a potentially more objective perspective but are typically more limited in their context and are comparatively costly and time consuming.⁸ A particular challenge for assessing internalizing problems is their 'covert' nature. That is, many of the emotional and cognitive symptoms of anxiety and depression may not be externally evident and young children may have difficulties expressing their inner states.

Research Context

Children's peer relations can be studied at multiple levels.¹ For example, at the level of *peer interactions*, the focus is on children's prosocial (e.g., cooperation, sharing, empathy), antisocial (e.g., aggressive) and asocial (e.g., socially withdrawn) behaviours with peers. *Peer relationships* typically refer to aspects of mutual friendships (e.g., intimacy, conflict), whereas *peer groups* pertain to children's experiences within a wider social circle (e.g., exclusion, victimization).

Key Research Questions

1. Do young children with elevated symptom levels of anxiety and depression behave in characteristic ways with peers? Do peer group behaviours predict the later development of internalizing problems?
2. How do peers behave and respond towards young anxious and depressive children?
3. What is the impact of peer relations on the development of anxiety and depression in childhood? How might peers act as a risk or protective factor for young children prone to internalizing problems?

Recent Research Results

Social behaviours of anxious and depressive young children

Results from a growing number of studies suggest that young children prone to internalizing problems display characteristic socially withdrawn behaviours amongst peers.⁸ That is, when faced

with opportunities for social interaction, be it at preschool, playgroup, or on the playground, anxious and depressive children tend to keep to themselves, refrain from talking, and rarely initiate social exchanges with other children. As well, both anxious and depressive young children demonstrate deficits in social skills (e.g., making eye contact, initiating conversational requests) that may further impede their abilities to participate in peer activities.^{9,10,11}

Although anxious children might be interested in social interaction, this desire to approach others is often inhibited by social reticence. As a result, they tend to spend more time watching other children without joining and hovering on the edge of social groups.⁸ Although less studied, there is some evidence to suggest that young depressive children also experience social impairment.¹² For example, children who display greater depressive symptoms are more likely to avoid social interactions.¹³ Moreover, symptoms of depression in early childhood are associated with negative peer experiences, including peer rejection, exclusion, and victimization.^{14,15,16} There is also substantial longitudinal evidence linking social withdrawal in childhood with the later development of more significant internalizing problems.^{17,18,19} For example, Katz and colleagues²⁰ followed over 700 children from early childhood to young adulthood and described a pathway linking social withdrawal at age 5 years – to social difficulties with peers at age 15 years – to diagnoses of depression at age 20 years.

Peer responses to anxious and depressive children

Even in early childhood, anxious and depressive children tend to experience negative responses from peers.²¹ For example, as mentioned earlier, young children who display symptoms of internalizing problems are more likely to be disliked, excluded, and victimized by peers.^{14,15,16} There is also evidence (predominantly with older children) that anxious and depressive children have fewer friends, and that their friendships tend to be of lower quality.^{5,22} Furthermore, children (for various reasons) tend to have friends with similar levels of anxious or depressive symptoms,^{23,24} which may exacerbate their own social difficulties.²⁵ Although it has been suggested that symptoms of anxiety and depression can be difficult to detect in childhood,²⁶ it seems clear that the group behaviours of anxious and depressive children do not go unnoticed by peers. It is likely the behavioural characteristics of anxious and depressive children evoke more negative responses from peers. For instance, social withdrawal and other socially unskilled behaviours (regardless of whether they arise from feelings of anxiety/depression) are strong predictors of concurrent and subsequent peer rejection and victimization.^{27,28}

Impact of peer relations on the development of anxiety and depression

Being excluded, rejected, and victimized by peers can have long-term negative consequences for young children.¹ In particular, the experience of peer victimization or having no friends in early childhood can promote the later development of anxiety and depression.^{29,30} Unfortunately, not only are anxious and depressive children more prone to experience problematic peer relations, they also appear to be particularly vulnerable to the negative impact of these experiences.^{31,32} For example, Gazelle and Ladd³³ found that kindergarten children displaying early signs of anxiety who were also excluded by peers were more likely to remain anxious and develop depressive symptoms through the 4th grade. In contrast, young anxious children who were not excluded were less likely to remain anxious and did not tend to develop signs of depression. However, there is also at least some evidence to suggest that socially withdrawn, anxious and depressive children can also particularly benefit from positive peer relationships.^{34,35,36} For example, Laursen and colleagues³⁷ reported that having at least one close friend attenuated links between social isolation and the development of internalizing problems in early childhood.

Research Gaps

Despite increased attention towards the early signs of internalizing problems in young children, there remains limited research specifically examining the potentially important role of peers, particularly in relation to depressive symptoms.³⁸ Indeed, although there has been some movement towards assisting young anxious and depressed children,³⁹ there remains little research explicitly acknowledging the potentially important role that peers might play in early intervention programs.

Peer difficulties are likely only part of a more complex process linking other behaviours and skills (e.g., conduct problems, executive functioning) to internalizing problems.^{40,41} There is also growing evidence suggesting that there may be other factors to consider that may heighten or lower risks for negative outcomes related to peer difficulties and internalizing problems among young children. For example, having lower inhibitory control and fewer perceived positive relationships appears to increase the risk for internalizing problems among those who are victimized at a young age.⁴² In contrast, there is some indication that engaging in prosocial behaviours,⁴³ having friends and supportive parents,⁴⁴ and having high emotion regulation^{30,45} can buffer (or protect) bullied, victimized, and rejected youth from internalizing problems. Future research is needed to further understand the pathways and processes linking peer relations and internalizing problems among

children in order to better inform prevention and intervention efforts. For example, it may be beneficial for intervention programs to simultaneously target internalizing and peer problems,¹⁴ as well as other potentially relevant factors, in order to address at-risk children's needs.

Conclusions

Peers play an important and unique role in children's development. The peer group is also a common setting for young children to display early signs of internalizing problems, such as anxiety and depression. Anxious and depressive young children often experience significant challenges in their social relationships with peers. To begin with, young children prone to such internalizing problems tend to be quiet and withdrawn in the company of peers and may also display poor social skills. Perhaps as a result, young children with internalizing problems are more frequent targets for peer exclusion and victimization. In and of themselves, such negative peer experiences carry an increased risk for a host of later social, emotional and academic difficulties. Unfortunately, young children prone to internalizing problems also appear to be particularly vulnerable to these negative effects – which often heighten symptoms of anxiety and depression. This can create a negative cycle that serves to exacerbate risk for longer term maladaptive outcomes. However, there is at least some preliminary evidence (particularly among older children) that positive peer relationships (e.g., a close friendship) can help to protect anxious and depressive children from some of the negative consequences of early internalizing difficulties.

Implications

Some potentially important implications can be derived from this review for parents, early childhood educators, teachers, and practitioners. First, we need to continue to raise awareness about the early emergence of anxiety and depression in young children, as symptoms of internalizing problems can often go unnoticed by others. Second, parents, teachers, and others should monitor young children's early social interactions as a potential window into their emotional well-being. For example, a child who frequently displays quiet, reticent and socially withdrawn behaviours when amongst peers may warrant closer attention. Similarly, early evidence of peer group difficulties such as exclusion or victimization should not be allowed to continue unaddressed. In this regard, peer group behaviours can serve as potential 'marker variables' (i.e., early warning signs) of internalizing problems. Finally, appropriate early intervention has been shown to effectively decrease symptoms of internalizing problems in young children.^{46,47,48} The peer group may provide an important context for supporting these early

intervention approaches. Moreover, building social skills and promoting positive peer relationships may have direct benefits for young anxious and depressive children.

References

1. Rubin KH, Bukowski W, Bowker JC. Children in peer groups. In: Bornstein MH, Leventhal T, eds. *Handbook of child psychology and developmental science: Volume 4, Ecological settings and processes in developmental systems* (7th ed). New York: Wiley-Blackwell; 2015:175-222.
2. Bufferd SJ, Olino TM, Dougherty LR. Quantifying severity of preschool-aged children's internalizing behaviors: A daily diary analysis. *Assessment* 2023;30(1):190-209.
3. Hopkins J, Gouze KR, Lavigne JV, Bryant FB. Multidomain risk factors in early childhood and depression symptoms in 6-year-olds: A longitudinal pathway model. *Developmental Psychopathology* 2020;32(1):57-71.
4. Steinsbekk S, Ranum B, Wichstrøm L. Prevalence and course of anxiety disorders and symptoms from preschool to adolescence: A 6-wave community study. *Journal of Child Psychology and Psychiatry* 2022;63(5):527-534.
5. de Lijster JM, van den Dries, Michiel A., van der Ende J, et al. Developmental trajectories of anxiety and depression symptoms from early to middle childhood: A population-based cohort study in the Netherlands. *Journal of Abnormal Child Psychology* 2019;47(11):1785-1798.
6. Tsotsi S, Goh S, Coplan RJ, et al. Co-occurrence of internalizing difficulties and aggression in early childhood and risk of mental health problems in middle childhood. *International Journal of Behavioral Development* 2023;47(5):384-396.
7. Navarro MC, Orri M, Nagin D, Tremblay RE, Oncioiu S, Ahun, MN, Melchior, M, van der Waerden, J, Galera, C, Cote, SM. Adolescent internalizing symptoms: The importance of multi-informant assessments in childhood. *Journal of Affective Disorders* 2020;266:702-709.

8. Coplan RJ, Ooi LL, Hipson WE. Solitary activities from early childhood to adolescence: Causes, content, and consequences. In: Coplan RJ, Bowker, JC, Nelson LJ, eds. *The handbook of solitude: Psychological perspectives on social Isolation, social withdrawal, and the experience of being alone* (2nd ed). New York: Wiley-Blackwell; 2021:105-116.
9. Coplan RJ, Arbeau KA, Armer M. Don't fret, be supportive! Maternal characteristics linking child shyness to psychosocial and school adjustment in kindergarten. *Journal of Abnormal Child Psychology* 2008;36:359-371.
10. Gal-Szabo DE, Spinrad TL, Eisenberg N, Sulik MJ. The relations of children's emotion knowledge to their observed social play and reticent/uninvolved behavior in preschool: Moderation by effortful control. *Social Development* 2019;28(1):57-73.
11. Vaughn BE, Santos AJ, Monteiro L, Shin N, Daniel JR, Krzysik L, Pinto A. Social engagement and adaptive functioning during early childhood: Identifying and distinguishing among subgroups differing with regard to social engagement. *Developmental Psychology* 2016;52(9):1422-1434.
12. Perren S, Alsaker FD. Depressive symptoms from kindergarten to early school age: Longitudinal associations with social skills deficits and peer victimization. *Child and Adolescent Psychiatry and Mental Health* 2009;3(28):1-10.
13. Coplan RJ, Ooi LL, Xiao B, Rose-Krasnor L. Assessment and implications of social withdrawal in early childhood: A first look at social avoidance. *Social Development* 2018;27(1):125-139.
14. Forbes MK, Fitzpatrick S, Magson NR, Rapee RM. Depression, anxiety, and peer victimization: Bidirectional relationships and associated outcomes transitioning from childhood to adolescence. *Journal of Youth and Adolescence* 2019;48(4):692-702.
15. Hoglund WLG, Chisholm CA. Reciprocating risks of peer problems and aggression for children's internalizing problems. *Developmental Psychology* 2014;50(2):586-599.
16. Solis I, Serna L, Stephen JM, Ciesielski KTR. Early behavioral markers of anxiety and reduced frontal brain alpha may predict high risk for bullying victimization. *Child Psychiatry and*

17. Kopala-Sibley D, Klein DN. Distinguishing types of social withdrawal in children: Internalizing and externalizing outcomes of conflicted shyness versus social disinterest across childhood. *Journal of Research in Personality* 2017;67:27-35.
18. Ladd GW. Peer rejection, aggressive or withdrawn behavior, and psychological maladjustment from ages 5 to 12: An examination of four predictive models. *Child Development* 2006;77(4):822-846.
19. Zdebik MA, Boivin M, Battaglia M, Tremblay RE, Falissard B, Côté SM. Childhood multi-trajectories of shyness, anxiety and depression: Associations with adolescent internalizing problems. *Journal of Applied Developmental Psychology* 2019;64:12.
20. Katz SJ, Conway CC, Hammen CL, Brennan PA, Najman JM. Childhood social withdrawal, interpersonal impairment, and young adult depression: A mediate model. *Journal of Abnormal Child Psychology* 2011;39(8):1227-1238.
21. Christina S, Magson NR, Kakar V, Rapee RM. The bidirectional relationships between peer victimization and internalizing problems in school-aged children: An updated systematic review and meta-analysis. *Clinical Psychology Review* 2021;85:19.
22. Parkes A, Sweeting H, Wight D. Early childhood precursors and school age correlates of different internalising problem trajectories among young children. *Journal of Abnormal Child Psychology* 2016;44(7):1333-1346.
23. Poirier CS, Brendgen M, Girard A, Vitaro F, Dionne G, Boivin M. Friendship experiences and anxiety among children: A genetically informed study. *Journal of Clinical Child and Adolescent Psychology* 2016;45(5):655-667.
24. Stone LL, Giletta M, Brendgen M, Otten R, Engels RCME, Janssens JMAM. Friendship similarities in internalizing problems in early childhood. *Early Childhood Research Quarterly* 2013;28(2):210-217.

25. Neal JW, Veenstra R. Network selection and influence effects on children's and adolescents' internalizing behaviors and peer victimization: A systematic review. *Developmental Review* 2021;59:17.
26. Berg-Nielsen TS, Solheim E, Belsky J, Wichstrom L. Preschoolers' psychosocial problems: In the eyes of the beholder? Adding teacher characteristics as determinants of discrepant parent-teacher reports. *Child Psychiatry and Human Development* 2012;3:393-413.
27. Ooi LL, Baldwin D, Coplan RJ, Rose-Krasnor L. Young children's preference for solitary play: Implications for socio-emotional and school adjustment. *British Journal of Developmental Psychology* 2018;36(3):501-507.
28. van der Wilt F, van der Veen C, van Kruistum C, van Oers B. Why do children become rejected by their peers? A review of studies into the relationship between oral communicative competence and sociometric status in childhood. *Educational Psychology Review* 2019;31(3):699-724.
29. Kamper-DeMarco KE, Ostrov JM. Prospective associations between peer victimization and social-psychological adjustment problems in early childhood. *Aggressive Behavior* 2017;43(5):471-482.
30. 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* 2021;34(1):53-70.
31. Greco LA, Morris TL. Factors influencing the link between social anxiety and peer acceptance: Contributions of social skills and close friendships during middle childhood. *Behavior Therapy* 2005;36:197-205.
32. Wang C, Williams KE, Shahaeian A, Harrison LJ. Early predictors of escalating internalizing problems across middle childhood. *School Psychology Quarterly* 2018;33(2):200-212.
33. Gazelle H, Ladd GW. Anxious solitude and peer exclusion: A diathesis-stress model of internalizing trajectories in childhood. *Child Development* 2003;74(1):257-278.

34. Erath SA, Flanagan KS, Bierman KL. Early adolescent school adjustment: Associations with friendship and peer victimization. *Social Development* 2008;17(4):853-870.
35. Markovic A, Bowker JC. Friends also matter: Examining friendship adjustment indices as moderators of anxious-withdrawal and trajectories of change in psychological maladjustment. *Developmental Psychology* 2017;53(8):1462-1473.
36. Schrepferman LM, Eby J, Snyder J, Stropes J. Early affiliation and social engagement with peers: Prospective risk and protective factors for childhood depressive behaviors. *Journal of Emotional and Behavioral Disorders* 2006;14(1):50-61.
37. Laursen B, Bukowski WM, Aunola K, Nurmi J-E. Friendship moderates prospective associations between social isolation and adjustment problems in young children. *Child Development* 2007;78(4):1395-1404.
38. Whalen DJ, Luby JL, Tilman R, Mike A, Barch D, Belden AC. Latent class profiles of depressive symptoms from early to middle childhood: Predictors, outcomes, and gender effects. *Journal of Child Psychology and Psychiatry* 2016;57(7):794-804.
39. Baughman N, Prescott SL, Rooney R. The prevention of anxiety and depression in early childhood. *Frontiers in Psychology* 2020;11:517896.
40. Gooren EM, van Lier PA, Stegge H, Terwogt MM, Koot HM. The development of conduct problems and depressive symptoms in early elementary school children: The role of peer rejection. *Journal of Clinical Child and Adolescent Psychology* 2011;40(2):245-253.
41. Wang Y, Zhou X. Longitudinal relations between executive function and internalizing problems in grade school: The role of peer difficulty and academic performance. *Developmental Psychology* 2019;55(10):2147-2158.
42. Denio EB, Keane SP, Dollar JM, Calkins SD, Shanahan L. Children's peer victimization and internalizing symptoms: The role of inhibitory control and perceived positive peer relationships. *Merrill-Palmer Quarterly* 2020;66(1):24.

43. He J, Koot HM, Buil JM, Lier PAC. Impact of low social preference on the development of depressive and aggressive symptoms: Buffering by children's prosocial behavior. *Journal of Abnormal Child Psychology* 2018;46(7):1497-1507.
44. Healy KL, Sanders MR. Mechanisms through which supportive relationships with parents and peers mitigate victimization, depression and internalizing problems in children bullied by peers. *Child Psychiatry and Human Development* 2018;49(5):800-813.
45. Cooley JL, Blossom JB, Tampke EC, Fite PJ. Emotion regulation attenuates the prospective links from peer victimization to internalizing symptoms during middle childhood. *Journal of Clinical Child and Adolescent Psychology* 2022;51(4):495-504.
46. Chronis-Tuscano A, Novick DR, Danko CM, Smith KA, Wagner NJ, Wang CH, Druskin L, Dougherty LR, Rubin KH. Early intervention for inhibited young children: A randomized controlled trial comparing the Turtle Program and Cool Little Kids. *Journal of Child Psychology and Psychiatry* 2022;63(3):273-281.
47. Fisak B, Penna A, Mian ND, Lamoli L, Margaritis A, Dela Cruz, Sonia Ann Marie F. The effectiveness of anxiety interventions for young children: A meta-analytic review. *Journal of Child and Family Studies* 2023;32(8):2546-2557.
48. Silverman WK, Pettit JW. Developmental window of opportunity: Implications of parent-child psychotherapy for early childhood depression treatment. *American Journal of Psychiatry* 2018;175(11):1051-1053.