ENCYCLOPEDIA
on Early Childhood
Development

Emotions and Psychopathology in the First 5 Years of Life

[1]Dione M. Healey, PhD, [2]Nathan S. Consedine, PhD

[1]Department of Psychology, University of Otago, New Zealand, [2]Department of Psychological Medicine, University of Auckland, New Zealand

September 2022, Éd. rév.

Introduction

From the cradle to the grave, emotions are central to human functioning, saturating our thoughts behaviour and experience in a manner so pervasive that we often forget. They motivate our most important decisions, lie at the heart of social relatedness and are central to socialization and cultural processes. Core aspects of emotions appear pre-wired1 and universal,[2] with aspects of expressive signalling, experience, and recognition appearing on a consistent developmental schedule.[1] In early life, emotions may act as a "readout" of internal states,[3] with precursor emotions evident within a few months and increasing differentiation seeing a near-adult level expressive repertoire within three years.[1] Developments in emotion regulation are somewhat slower and appear more closely tied to cognitive and social development.

Although debate remains,[4] Current thinking regarding emotions emphasizes their functionality; they represent adaptations shaped by natural selection to facilitate responding to recurrent situational types,[3] promoting coordinated and historically adaptive changes in cognition,[5]

©2022-2026 ABILIO | EMOTIONS

physiology,[6] expressive signals,[2] experience/motivation,[3] and behaviour.[7] Evolution has likely designed emotions to "fit" early life challenges[8] and the means by which they facilitate adaptation is constrained by the capacities of the developing child.[9] Importantly, emotions and emotion regulation sometimes [mal]function.

The focus of this chapter is on the role of emotion in psychopathology from birth to five years, a period in which behavioural, cognitive, and emotion regulatory skills interactively develop to influence child functioning. Developmentally, these years are focused on the acquisition of basic physical, cognitive, and emotional skills and on ensuring the environment meets basic needs. Early life development is inherently social. Styles of relating (attachment) becomes increasingly evident during this time, and core relationships come to serve as the foundation for the development of more advanced skills such as emotion regulation.[10]

Subject

Given their ubiquity in developmental processes, it is unsurprising that imbalances or dysregulations within emotion systems are central to psychopathology[11] among children[12] and adults.[13] Disturbances in emotional processes include issues with both positive and negative emotions, the excess and absence of emotions, regulatory issues, and disconnections among emotion sub-systems. Indeed, problems rooted in emotions are so pervasive that several writers have suggested the field should group disorders by emotional symptomatology.[14,15]

Emotions are central to the development and maintenance of psychopathology in early life. Research among children concentrates on links between temperament – a constellation of affective dispositions – and outcome,[16] particularly the roles of negative affectivity (NA)[17] and emotion regulation16. NA, a global measure of negative emotionality, incorporates experiences and expressions of sadness, fear, anger/frustration with high intensity[18] and predicts both internalizing and externalizing disorders.[19] Discrimination is somewhat better with emotion regulation; under-regulation manifests in externalizing disorders (e.g., hyperactivity, defiance, and aggression) and over-regulation predicts internalizing disorders (e.g., anxiety and depression.[20]

Problems

Progress has been made in the conceptualization and measurement of mental disorders among children in recent years.[21] Rates of disorders among children aged 2-5 years are similar to those

©2022-2026 ABILIO | EMOTIONS

among older children, at 16.2% overall, 9% for externalizing/behavioural disorders, and 10.5% for internalizing/emotional disorders [see 16 for a review]. However, despite improvements in the conceptualisation of the psychopathological subtypes, the specificity with which early risk factors link to outcomes remains poorly understood.[22]

In general, researchers conceptualize child psychopathology as having two broad classes of contributor – child temperament and environmental events/contexts. Pre-natal factors may influence the development of temperament and/or as an additional environmental influence.[23] The two extremes of temperamental emotionality – behavioural inhibition (over-regulation) and disinhibition (under-regulation) have been linked to different patterns of biological arousal and reactivity and show some ability to discriminate mental health outcomes. Work examining environmental factors reveals a similarly mixed bag of global and specific indicators.[24] Poor supervision, sexual abuse, and peer problems predict externalising disorders while neglect may be a specific predictor for Oppositional Defiant Disorder (ODD). Exposure to violence and being friendless are both globally predictive of internalizing disorder development while being raised in a single parent family or foster care specifically predicts Depression. In this study, harsh discipline was specific to Generalised Anxiety Disorder (GAD) and parental drug abuse and dangerous environments were associated with combined anxiety disorders indicators.[24]
In general then, both temperament and environmental contexts predict risk *in general*. Specificity is low, however, and how the two interact to influence goodness-of-it and the development of psychopathology is yet to be clearly determined.

Research Context

As noted, developmental work examining the predictors of child psychopathology has emphasized the role of broad risk characteristics in either the child or the caregiving environment. Both internalizing and externalizing problems have been linked with the temperamental trait of negative emotionality,[18] while any disruption in the development of attachment or self-regulatory ability (including behavioural, cognitive, and emotional) seems to predict increased risk.[25] “Goodness-of-fit” between child dispositions and parental characteristics are critical to the development of attachment and regulatory processes which, in turn, predict psychopathology.[26,27]

Key Research Questions

©2022-2026 ABILIO | EMOTIONS

The most pressing questions regarding the links between emotions and early psychopathology regard the specificity of the links between temperament, environmental events, and outcomes. The particular aspects of child temperament that predict specific outcomes need to be illuminated; it may be that to understand temperament's links to child mental health outcomes, we need to develop a more sophisticated characterisation of temperament and why we variation of this kind exists. One approach that might extend understanding is to explicitly examine temperament-linked dysfunctions as they occur within the experiential versus expressive aspects of the emotions systems. Although the visible aspects of emotions may index internal states,[3] emotion signals may or may not correspond to them in all instances and have their own distinct functions.[28] Similarly, work addressing the specificity of the links between environmental characteristics and child outcomes is urgently needed.

Recent Research Results

Some recent work attempting to "deconstruct" the general negative affect risk factor has been conducted. In one attempt, while both internalizing and externalizing children were rated higher on the emotions of anger, fear, and sadness than controls, there were few differences between the two groups, with internalizers slightly sadder and marginally less angry than externalizers.[29] Similarly, a meta-analysis looking at temperament as a prospective predictor of psychopathology and neurodiversity found that high negative emotionality and lower self-regulation predicted greater psychopathology in general.[30] Such findings suggest we have some way to go in seeking to understand how risk characteristics result in children being differentially "shunted" down externalizing versus internalizing pathways.

Research Gaps

Although progress has been made in the last few decades of research, gaps remain. First, despite an increase in the specificity with which environmental[24] and temperamental[31] characteristics are being measured as predictive of specific childhood disorders,[24] the search for specificity in the links between affective risk factors and outcomes has some way to go. Second, given the ubiquity of emotional processes to child psychopathology, it is surprising that the literature has yet to systematically examine the possible utility of a *transdiagnostic approach* (classification by common process rather than phenomenology or, in children, by behavioural manifestation).

©2022-2026 ABILIO | EMOTIONS

Conclusions

This chapter highlights the centrality of emotions to human functioning and how disruptions or imbalances in the development of emotion and emotion regulation increase the risk of psychopathology. While links between early global aspects of temperament (i.e., negative affectivity) and subsequent psychopathology are established, the specificity of the relations seen thus far is marginal and further investigation is required. Additionally, while child temperament and environmental characteristics impact risk (both alone and in interaction), research examining the "fit" between disposition and environmental factors is scanty and further work examining how factors such as caregiver characteristics, socioeconomic class, trauma, and societal context interact with child temperament is sorely needed.

Implications for parents, services, and policy

Although there are gaps, the centrality of emotion and emotion regulatory processes in the development and maintenance of psychopathology is clear – inborn temperament sets the stage for the individual's emotional profile and thus influences how environments interact with them. Data regarding these two key characteristics underscore the importance of the "fit" between child and environmental factors and provide some guidance regarding possible interventions. Work regarding hyperactive preschoolers, for example, highlights the protective role that positive parenting and parent-child synchrony may have among at-risk children.[26,27] Such work suggests that early interventions should focus on programmes that improve parent-child emotional synchrony and foster effective emotional control. Examples of such work includes Parent-Child Interaction Therapy[32] and the Incredible Years programme.[33]

References

1. Lewis M. The emergence of human emotions. In: Lewis M, Haviland-Jones J, Feldman-Barrett L, eds. *Handbook of emotions*. Guilford: New York: 2008:304-319.
2. Elfenbein HA, Ambady N. On the universality and cultural specificity of emotion recognition: A meta-analysis. *Psychological Bulletin* 2002;128(2):203-235.
3. Izard CE. *The psychology of emotions*. New York: Plenum Press; 1991.
4. Feldman-Barrett L. Are emotions natural kinds? *Perspectives on Psychological Science* 2013;1(1):28-58.

©2022-2026 ABILIO | EMOTIONS

5. Keltner D, Ellsworth PCE, Edwards K. Beyond simple pessimism: Effects of sadness and anger on social perception. *Journal of Personality & Social Psychology* 1993;64(5):740-752.
6. Larsen JT, Berntson GG, Poehlmann KM, Ito TA, Cacioppo JT. The psychophysiology of emotion. In: Lewis M, Haviland-Jones J, Feldman-Barrett L (eds). *The handbook of emotions.* 3rd ed. New York: Guilford, 2008:180-195.
7. Consedine NS, Strongman KT, Magai C. Emotions and behavior: Data from a cross-cultural recognition study. *Cognition and Emotion* 2003;17(6):881-902.
8. Consedine NS, Magai C. Emotion development in adulthood: A developmental functionalist review and critique. In: Hoare C, ed. *The Oxford handbook of adult development and learning.* Oxford University Press: New York; 2006:209-244.
9. Consedine NS. Capacities, targets, and tactics: Lifespan emotion regulation viewed from developmental functionalism. In: Nyclicek I, Vingerhoets A, Zeelenberg M, eds. *Emotion regulation and wellbeing.* New York: Springer; 2011:13-29.
10. Kerig PK, Wenar C. *Developmental psychopathology: from infancy through adolescence*. 5th ed. New York: McGraw-Hill; 2006.
11. Beauchaine TP, Cicchetti D. Emotion dysregulation and emerging psychopathology: A transdiagnostic, transdisciplinary perspective. *Development & Psychopathology* 2019;31(3):799-804.
12. Bradley SJ. *Affect regulation and the development of psychopathology*. New York: Guilford; 2000.
13. Kring AM. Emotional disturbances as transdiagnostic processes. In: Lewis M, Haviland-Jones J, Feldman-Barrett L, eds. *The handbook of emotions*. Guilford: New York; 2008:691-705.
14. Berenbaum H, Raghavan C, Le H-N, Vernon LL, Gomez JJ. A taxonomy of emotional disturbances. *Clinical Psychology: Science and Practice* 2003;10:206-226.
15. Watson D. Rethinking the mood and anxiety disorders: A quantitative hierarchical model for DSM-V. *Journal of Abnormal Psychology*. 2005;114(4):522-536.
16. Egger HL, Angold A. Common emotional and behavioural disorders in preschool children: presentation, nosology, and epidemiology. Journal of Child Psychology and Psychiatry 2006;47(3-4):313-337.

©2022-2026 ABILIO | EMOTIONS

17. Rothbart MK, Ahadi SA, Hershey KL, Fisher P. Investigations of temperament at three to seven years: The children's behavior questionnaire. *Child Development* 2001;72(5):1394-1408.

18. Lengua LJ, West SG, Sandler IN. Temperament as a predictor of symptomatology in children: Addressing contamination of measures. *Child Development* 1998;69(1):164-181.

19. Leaberry KD, Rosen PJ, Slaughter KE, Reese J, Fogleman ND. Temperamental negative affect, emotion-specific regulation, and concurrent internalizing and externalizing pathology among children with ADHD. *Attention Deficit and Hyperactivity Disorders* 2019;11(3):311-332.

20. Cole PM, Michel MK, Teti LO. The development of emotion regulation and dysregulation: A clinical perspective. *Monographs of the Society for Research in Child Development* 1994;59(2-3):73-102.

21. Carter AS, Briggs-Gowan MJ, Davis NO. Assessment of young children's social-emotional development and psychopathology: Recent advances and recommendations for practice *Journal of Child Psychology and Psychiatry and Allied Disciplines* 2004;45(1):109-134.

22. Copeland W, Shanahan L, Costello EJ, Angold A. Configurations of common childhood psychosocial risk factors. *Journal of Child Psychology and Psychiatry and Allied Disciplines* 2009;50(4):451-459.

23. Tien J, Lewis GD, Liu J. Prenatal risk factors for internalizing and externalizing problems in childhood. *World Journal of Pediatrics* 2020;16(4):341-355.

24. Shanahan L, Copeland W, Costello EJ, Angold A. Specificity of putative psychosocial risk factors for psychiatric disorders in children and adolescents. *Journal of Child Psychology and Psychiatry and Allied Disciplines* 2008;49(1):34-42.

25. Muris P, Ollendick TH. The role of temperament in the etiology of child psychopathology. Clinical Child and Family Review 2005;8(4):271-289.

26. Healey DM, Flory JD, Miller CJ, Halperin JM. Maternal positive parenting style is associated with better functioning in hyperactive/inattentive preschool children. Infant and Child Development 2011;20(2):148-161.

27. Healey DM, Gopin CB, Grossman BR, Campbell SB, Halperin JM. Mother-child dyadic synchrony is associated with better functioning in hyperactive/inattentive preschoolers. *Journal of Child Psychology and Psychiatry* 2010;51(9):1058-1066.

©2022-2026 ABILIO | EMOTIONS

28. Brown WM, Consedine NS. Just how happy is the happy puppet? An emotion signaling and kinship theory perspective on the behavioral phenotype of Angelman Syndrome children. *Medical Hypotheses* 2004;63(3):377-385.

29. Eisenberg N, Sadovsky A, Spinrad TL, Fabes RA, Losoya SH, Valiente C, Reiser M, Cumberland A, Shepard SA. The relations of problem behavior status to children's negative emotionality, effortful control, and impulsivity: Concurrent relations and prediction of change. Developmental Psychology 2005;41(1):193-211.

30. Kostyrka-Allchorne K, Wass SV, Sonuga-Barke EJS. Research Review: Do parent ratings of infant negative emotionality and self-regulation predict psychopathology in childhood and adolescence? A systematic review and meta-analysis of prospective longitudinal studies. *Journal of Child Psychology and Psychiatry* 2019;61(4):401-416.

31. Eisenberg N, Sadovsky A, Spinrad TL. Associations of emotion-related regulation with language skills, emotion knowledge and academic outcomes. *New Directions in Child and Adolescent Development* 2005;(109):109-118.

32. Eyberg SM, Matarazzo RG. Training parents as therapists: A comparison between individual parent–child interaction training and parent group didactic training. *Journal of Clinical Psychology* 1980;36(2):492-499.

33. Webster-Stratton C. Preventing conduct problems in head start children: Strengthening parenting competencies. *Journal of Consulting and Clinical Psychology* 1988;66(5):715-730.

©2022-2026 ABILIO | EMOTIONS