

## EMOTIONS

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# Emotions and Psychopathology in the First 5 Years of Life

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### 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 their important role. 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-wired<sup>1</sup> and universal,<sup>2,3</sup> with aspects of expressive signalling, experience and recognition appearing on a consistent developmental schedule.<sup>1</sup> In early life, emotions may act as a “readout” of internal states,<sup>4</sup> with precursor emotions evident within a few months and increasing differentiation seeing a near-adult level expressive repertoire within three years.<sup>1</sup> Developments in emotion regulation are somewhat slower and appear more closely tied to cognitive and social development.

Current thinking regarding emotions emphasizes their functionality; they represent adaptations shaped by natural selection to facilitate responding to recurrent situational types,<sup>5-7</sup> promoting functional changes in cognition,<sup>8</sup> physiology,<sup>9</sup> expressive signals,<sup>2</sup> experience/motivation<sup>4</sup> and behaviour.<sup>10</sup> Evolution has likely designed emotions to “fit” early life challenges<sup>5</sup> and the means by which they facilitate adaptation is constrained by the capacities of the developing child.<sup>11</sup> 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.<sup>12</sup>

## Subject

Given their ubiquity in developmental processes, it is unsurprising that imbalances or dysregulations within emotion systems are central to psychopathology among children<sup>13</sup> and adults.<sup>14,15</sup> Disturbances in emotional processes include issues with 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.<sup>16-18</sup>

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,<sup>19,20</sup> particularly the roles of negative affectivity (NA)<sup>21</sup> and emotion regulation.<sup>13</sup> NA, a global measure of negative emotionality, incorporates experiences and expressions of sadness, fear, anger/frustration with high intensity<sup>21</sup> and predicts both internalizing and externalizing disorders.<sup>22</sup> 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).<sup>23,24</sup>

## Problems

Progress has been made in the conceptualization and measurement of mental disorders among children in recent years.<sup>25</sup> Rates of disorders among children aged 2-5 years are similar to those among older children, at 16.2% overall, 9% for externalizing/behavioural disorders and 10.5% for internalizing/emotional disorders.<sup>20</sup> However, despite improvements in the conceptualisation of the psychopathological subtypes, the specificity with which early risk factors link to outcomes remains poorly understood.<sup>26</sup>

In general, researchers conceptualize child psychopathology as having two broad classes of contributor – child temperament and environmental events/contexts. 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.<sup>27</sup> 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.<sup>27</sup>

In general then, both temperament and environmental contexts predict risk in general. Specificity is low and how the two interact to influence goodness-of-fit 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,<sup>19,28,29</sup> while any disruption in the development of attachment or self-regulatory ability (including behavioural, cognitive, and emotional) seems to predict increased risk.<sup>30</sup> “Goodness-of-fit” between child dispositions and parental characteristics are critical to the development of attachment and regulatory processes which, in turn, predict psychopathology.<sup>31,32</sup>

## **Key Research Questions**

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 understanding of what temperament is and why we have it. 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,<sup>4</sup> emotion signals may or may not correspond to them in all instances and have their own distinct functions.<sup>33</sup> 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.<sup>34</sup> Such a finding suggests 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<sup>27</sup> and temperamental<sup>35</sup> characteristics are being measured as predictive of specific childhood disorders,<sup>27</sup> the search for specificity in the links between 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 examine the possible utility of a transdiagnostic approach (classification by common process rather than phenomenology or, in children, by behavioural manifestation).

## **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.<sup>31,32</sup> Such work suggests that early interventions should focus on programs that improve parent-child emotional synchrony and foster effective emotional control. Examples of such work includes Parent-Child Interaction Therapy<sup>36</sup> and the Incredible Years program.<sup>37</sup>

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