



# Introduction: Emotional Development, Past, and Present

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## Abstract

In the Introduction to the volume, we present a brief history of emotion research and how research on emotional development differentiates itself from the broader emotion literature.

In 1884, William James wrote an essay that posed an important question: *What is an emotion?* It is a question that has fascinated philosophers and scientists for centuries before James' time. In the essay, James argued that emotions have a physiological basis—a response to Charles Darwin's published book, *The Expression of Emotions in Men and Animals* (1872), which posited that through natural selection, humans and animals evolved a shared set of traits and include emotional responses. These early works set the stage for the classic discrete emotions perspective, which suggests that emotions are biologically based, universally distinguishable, and cause a narrow set of stereotyped responses (e.g., Ekman & Cordaro, 2011; Ekman &

Keltner, 1970; Izard, 1993, 2007). This view was contrasted by appraisal perspectives which first gained traction in the 1960s (Arnold, 1960; Clore & Ortony, 2008; Lazarus, 1984) and then by modern constructivist perspectives (e.g., Barrett, 2006; Cunningham, Dunfield, & Stillman, 2013), both of which highlight the important roles of cognition and context in emotional responding. According to these perspectives, emotions *emerge* from the conscious experience of a confluence of physiological and behavioral responses to an event (e.g., Barrett, 2006; Coan, 2010).

The field of emotion research has not yet agreed on an answer to James' classic question, but these varying emotion theories that first began to take form in the late 1800s have now shaped over a century of scientific research. This research has not only attempted to answer James' question about *what* an emotion is (e.g., whether it is a natural kind or a multi-component system), but it has also attempted to answer the question of *where* an emotion is (e.g., whether they are distinctly represented in the brain or whether they are conscious feelings that emerge from a variety of lower-level processes), *why* we have emotions at all (e.g., whether they evolved to help humans cope with a unique problem in the environment or whether they are the result of a combination of more general physiological and cognitive processes), and *how* emotions are related to other cognitive and behavioral processes.

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These questions are crucially important to our understanding of human emotion. However, what is notably absent from this set of questions are two core issues: *When* do emotions emerge in development, and *for whom* are they most likely to emerge? These questions may not be in the forefront of the minds of social and cognitive psychologists, but they are critical to researchers interested in *emotional development*. Emotional development is generally seen as a small subset of the larger field of emotion research. Indeed, in the most prominent emotion compendiums such as the *Handbook of Emotions* or the *Handbook of Affective Sciences*, development is covered as a subset in one of several larger sections. However, despite having some small real estate in these larger handbooks, researchers who study emotional development approach it from a variety of perspectives and methodologies that are unique to developmental science.

The empirical study of emotional development perhaps started in the 1960s, when John Bowlby and Mary Ainsworth began an investigation of the effects of maternal separation on child development. In her classic “strange situation” paradigm, Ainsworth tried to measure infants’ emotional responses to maternal separation in and out of the presence of a stranger in order to describe their attachment style (Ainsworth & Bell, 1970). Around the same time, Jerome Kagan was also studying emotional responses in infants (Kagan, Moss, & Kagan, 1962). However, he was interested in using their emotional responses to both novel objects and people to identify infant temperament—or an individual’s own style of emotional responding—and how it predicted their behavior in social situations. Both Ainsworth’s and Kagan’s approaches to studying emotions in infants and children differed significantly from those of their contemporaries who were studying emotion in adults. Instead of asking what emotions are, they focused on individual differences in emotional responding and how those individual differences predicted other important behaviors like attachment quality or sociability over the course of development.

In keeping with this initial line of work, contemporary developmental psychologists who

study emotion still take a very different approach when compared to social and cognitive psychologists and neuroscientists who mainly focus on adults. Specially, while developmentalists ask the *what, where, why, and how* questions of emotion, they are also interested in *when* emotions develop throughout the lifespan and often take a person-centered approach—the question of *who*—to ask how individual differences in emotional responding predict other behaviors. Along with a unique set of questions, developmental psychologists approach emotion with a unique set of methods that are especially tailored to younger participants. Unlike typical adults, infants and young children are either non-verbal or have limited language abilities, they are notoriously noncompliant, relatively incapable of following lengthy instructions, and typically do not maintain the relatively sedate state needed to provide neural measures (e.g., fMRI). Thus, developmentalists often have to rely on a unique set of methodologies, such as passive viewing attention measures, eye-tracking, gross behavioral responses, physiology, EEG/ERP, and parent report.

Further, although many developmentalists use either discrete emotions or emergent frameworks in their work, others use one of two developmental approaches to guide their methodologies and research questions. Many, for example, take a functionalist perspective on emotional development, which is a process-based approach that focuses on the adaptive function that each emotion serves. Others take a dynamic systems approach, which focuses on describing the process by which emotions emerge across development based on context and individual differences (for a review of both perspectives, see Witherington & Crichton, 2007). Although the discrete versus emergent debate resonates loudly in the emotion literature more broadly, it is clear from the chapters that follow that the functionalist and dynamic systems perspectives are more dominant in the developmental literature.

Altogether, while emotional development is indeed a subfield of emotion research, it is also a unique, burgeoning field of its own, with distinct theoretical frameworks, methodologies, and empirical questions. This is the first handbook that

focuses on emotional development specifically, highlighting its unique and important place in the broader emotion literature. The chapters that follow are organized to reflect some of the broader themes present in the emotion literature, most of which are touched upon above. Part I addresses the theoretical and biological foundations of emotional development, with chapters on theories of emotional development, the physiology and neuroscience of emotional development, the expression and perception of emotional facial expressions, and temperament. Part II addresses research on individual (or discrete) emotions, including happiness, anger, sadness, fear, disgust, and the self-conscious and pro-social emotions. Part III focuses on the roles of cognition and context on emotional development, with chapters on cognition, emotion regulation, theory of mind, language, education, emotional competence, morality, culture, adolescence, and family. Finally, Part IV presents atypical emotional development, including chapters on anxiety, depression, developmental disorders, maltreatment, and deprivation.

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