

INTRODUCTION

CONCEPTUALIZING AND ADVANCING AN INTERDISCIPLINARY ACCOUNT OF EMOTIONAL DEVELOPMENT

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Time is commonly considered the fourth dimension in mathematics and physics, after length, width, and depth. Likewise, there may well be a case for considering time as the fourth dimension in the scientific study of human nature. After behavior, cognition, and emotion, perhaps it is *time*, and, more specifically, *development*, that can be seen as a measure and explanation of how and why we do what we do, think what we think, and feel what we feel. After all, understanding what *is* necessitates an understanding of what *was* and what *will be*, as well as the multideterminant factors that account for such change. This is the important role played by developmental researchers, whatever their discipline. Here, the focus is specifically on emotional development, with perspectives provided from across the affective sciences to these important questions.

The collection of chapters presented in this handbook highlights important considerations for the study of emotion, development, and emotional development. Here, we consider each of these terms, and briefly examine how the integrated and multidisciplinary nature of this handbook can advance the study of emotional development.

WHAT IS EMOTION?

Emotions entail relating with one's environment on matters of personal significance (Barrett & Campos, 1987; Frijda, 1986). How one relates with and assigns significance to one's environment varies from person to person, age to age, group to group, and generation to generation, as well as from species to species. Be they human adults or children, canines, felines, or porcupines, organisms are inherently constrained in how they relate with and respond to the environment. Thus, overemphasis on a singular aspect

of emotion—be it the face, action tendency, or neuronal underpinnings—risks inadvertently diminishing or eliminating the emotional experiences of those organisms for whom such aspects of emotion may be alternatively formed or absent (Darwin, 1872/2009). While this might be a novel consideration for the psychologist, neuroscientist, or philosopher, it is likely obvious to scholars of anthropology, history, or sociology.

Emotions are simultaneously specific and variable phenomena. Each emotion has some specific core—a common theme across occurrences of the emotion. Whether I am sad about the result of a football match, or because I forgot my wallet and cannot buy my friend a coffee, or because a loved one has died, a *loss* has taken place: we venture that all occurrences of sadness are inextricably linked, although certainly to different degrees, to *loss*. This *essence* is where a definition of sadness, or indeed any other emotion, should begin: in psychology, the idea of “core relational themes” (Lazarus, 1991) or “recurrent adaptive situations” (Tooby & Cosmides, 1990a,b); in philosophy, the idea of “formal objects” (Teroni, 2007). Importantly, in every culture where *loss* exists, it is likely that some signal for the associated emotion, or at least the *possibility of understanding* the experience of sadness, exists. Yet, somewhat paradoxically, emotions are also inherently variable. The behavioral and cognitive consequences of discrete emotions can differ considerably across contexts and cultures (Lutz & White, 1986; Oatley, 1993), and their manifestation can even vary between and within individual organisms (Darwin, 1872/2009; Markus & Kitayama, 1991; Kuppens et al., 2009). Navigating the conceptual space circumscribed by the axes of specificity and variability has both perplexed and excited emotion researchers for centuries; the difficulty of such a venture is compounded when one considers the temporal dimension of development.

WHAT IS DEVELOPMENT?

There is some debate among developmental researchers regarding what is meant by *development*. Is the term synonymous with change? To some extent, yes. Development does entail change, but only in the sense that what *was* is related to, yet different from, what *is*, and what *will be*. Development can be gradual or abrupt, stepwise or emergent, linear or nonlinear, but the changes from before to after are necessarily related (see Bowlby, 1969; Thelen & Smith, 1994). Thus, while paper burned to ash changes, one would not conclude that development has transpired. Development would entail the paper changing from a simple sheet into, say, a love letter, a legal contract, or a paper airplane. To say that a process, individual, culture, or species develops is not necessarily to assign lesser or greater importance to what was or will be; it can simply be to acknowledge that the phenomenon of interest changes from one point in time to another, while retaining some related aspect of its previous state or nature.

Developmental researchers enjoy a unique and privileged vantage point to identify associations and variabilities between and within experiences and behaviors, to connect the shifting dots, as it were. In so doing, we can provide a counterpoint to the

tendency to reduce consideration of the relevant phenomenon to a study of state, or to the assessment of one particular criterion or component. As researchers of emotional development, then, it is our task to consider how a particular emotion unfolds given the context, the individual, the group, and the timescale.

WHAT IS EMOTIONAL DEVELOPMENT?

Having laid out our view of emotion and development, we now consider development of emotion. From a developmental perspective, the flexibility of the function of emotions as adaptive organizing systems across a range of contexts (Sroufe & Waters, 1977) is of greatest consequence. As described in the previous section, a view of emotions as specific points in time leads inextricably to the misconception that emotions are a state. Emotions emerge and they subside: they are a process, not an outcome. Thus, while it can be said that an individual experiences shame, that shame may have unfolded from overzealous anger in response to a particular transgression. Likewise, the child's internalization of standards may result in sadness at one age manifesting as shame at a later age—with what qualifies as shameful varying across cultures and historical periods. In this way, emotional experiences unfold in an organized process, take on nuance, and may even qualitatively change to another emotion. On the surface, shame is not more or less developed than anger, just as the love letter or the paper airplane are not more or less developed. Rather, such forms of being are better considered as more or less adaptive given the constraints of the context and the individual (see Bowlby, 1969; Bril, 2015).

Considerations of how emotions are elicited, persist, change, and evolve are integral parts of the study of emotional development. For example, the temporal unfolding of emotion is a persistent challenge for researchers, and there are important sensitivities in framing from one discipline to another. What the neuroscientist considers a lengthy process, the historian likely deems too short to consider for study. In considering the ontogeny and elicitation of emotion, the emotion process should not be thought of as a line with a start and end point. Rather, the process can better be conceived as a looping spiral of perception, evaluation, and action serving to regulate one's relations with the environment on matters of personal significance (Gross, 2015; Wiener, 1948). Moreover, it can be expected that such relational significance inevitably changes across people (e.g., Davidson, 1998), cultures (e.g., Briggs, 1970), historical periods (e.g., Febvre, 1938/1973), and species (e.g., Darwin, 1872/2009). Indeed, it is possible, even likely, that emotions manifest and function differently in the newborn and the adult, as well as the bonobo and the swan, and even within groups of individuals. Thus, to say that an emotion *is* misses the flexibility inherent in the process. It is more valid to consider what a particular emotion is for a specific organism, in a specific environment, at a specific point in time, and how the relational significance changes within, between, or across persons, societies, cultures, species, and time.

Thus, if development concerns the study of what *was* and what *will be* to gain a better idea of what *is*, and if emotions concern what is significant or what matters, then

emotional development can be loosely defined as the study of what mattered in the past and what will matter in the future in order to better understand what matters in the present. Addressing these questions is the important role played by developmental researchers of emotion, irrespective of their discipline.

ETHOS OF THIS HANDBOOK

An important step in moving the study of emotional development forward entails the integration and synthesis of various approaches. In writing this introduction, we realize that not every researcher will agree with our characterizations of emotion, development, and emotional development. However, any meaningful discussion of these constructs must begin with a search for common ground. This introduction and, more generally, this handbook, are attempts at achieving this goal. The overarching ethos is to nudge people together from disparate research approaches and backgrounds, illustrate connections, and stimulate conversations—be they internal monologues or new collaborations.

With this ethos in mind, two important decisions were taken while conceiving of and realizing this project. First and foremost, we sought to interpose and interweave different disciplines and perspectives. Thus, each section of the handbook consists of chapters from multiple disciplines and different lenses of study to encourage researchers to either stumble upon or seek out theoretical perspectives and empirical data from outside of their usual focus. Second, the chapters within each section are connected by a broader theme of research (e.g., communication and understanding, interactive contexts) rather than the canonical approach of grouping chapters based on approach or population of study (e.g., research methods, atypical development, comparative research). Oftentimes, we simply do not know how people study the same thing across disciplines, and the canonical organizational approach, by specific topic, would have resulted in the siloing of discipline-specific sections and been contradictory to our first aim. In fact, it was very difficult to separate the chapters into sections within the handbook due to the clear connections that exist between the chapters across sections. For example, socialization is inherently linked with the broader evolutionary history of our species, the important role of communication, how people interact with one another, and long-term value systems that result. Thus, while the sections and chapters are necessarily delimited, the reader is encouraged to consider how they are interrelated.

Our intent for this handbook was to take the first step of bringing together scholars from diverse disciplines to discuss emotional development in an interdisciplinary manner. We have admittedly fallen short of this aim. Specifically, while each section includes researchers from different disciplines, this volume is multidisciplinary rather than interdisciplinary. Producing a truly interdisciplinary volume would have entailed uniting researchers to celebrate similarities and differences from each other's discipline, spending time learning the strengths and weakness of other perspectives, integrating

what might apply to one's own discipline, and, perhaps even more ambitiously, working with people from other disciplines around a particular question or topic. While this handbook may not have actualized this ideal, it is our hope that it will serve to shift the field's center of gravity toward taking such a step and that the subsequent momentum can propel the study of emotional development forward.

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