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Emotional development across cultures

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### **Abstract**

The biological characteristics of human infants set up a developmental trajectory toward forming emotional attachments with caregivers. The caregiver-infant system sets the stage for later development and learning through these early interactions in a bidirectional manner. This system is common across cultures and social contexts and therefore we see similar emotion recognition, production and communication across diverse contexts in the first few years of life. Yet, differences emerge in how caregivers respond to infants and shape their expressions. This can be seen in cultural display rules – that is, the expression of emotion based on social norms. We argue that emotions ground communication specifically through a process of mutually shared enjoyment (species-specific) and also develop in complexity as children learn words to describe and then reflect on emotional experience. Here we provide an overview of emotion development drawing on cross-cultural research.

**Keywords:** emotions; development; culture; infancy; responsiveness

## **Overview**

Humans are a cultural species, necessarily developing within cultures, as well as transforming and transmitting their culture. Infants are born into a caregiver-infant emotion system that plays a central and foundational role in early communication. This system sets up a process through which infants form emotional bonds with caregivers. Within this emotional system between an infant and caregiver, early non-linguistic communication begins and supports the development of more complex forms of communication, and eventually language development (Carpendale, 2018). Although the developmental process is similar across cultures, the ways in which it is shaped and expressed differs and may result in divergent patterns of developmental outcomes or displays of emotion across cultures (Halberstadt & Lozada, 2011; Greenfield et al., 2003). In this chapter, our objective is to describe the processes involved in this interactive, bidirectional emotional system of the first relationship between a caregiver and their infant. We provide evidence suggesting that the first relationship sets the emotional tone and is a necessary and universal feature of development which acts as a springboard for other forms of early communication. We organize the chapter by beginning in early infancy, describing both similarities and differences in the emotional system – focusing specifically on the infant in context with caregivers. We draw upon ethnographic as well as experimental evidence. We propose a developmental system with mutual joy as its foundation, which, we argue, is critical in grounding social and communicative development.

## **Emotions are embedded in culture**

It is clear from research conducted across cultures that societal pressures, norms and individual beliefs shape emotional communication styles – the expression and experience of emotion – of individuals embedded within a society (see Hofmann & Doan, 2018 for a description of the system). Understanding how emotion experience and expression is shaped by this cultural process early in development is the focus of this chapter. To fully understand the complex ways in which emotions impact the developmental process, we expand our lens beyond an urban and western setting to view emotional development across diverse cultural contexts (Henrich et al., 2010; Nielsen et al., 2017; Kline et al., 2018). The sample populations that make up 95% of developmental psychology research are from English-speaking, typically North American and Western European countries (Nielsen et al., 2017). This is problematic as this population has been shown to be an unrepresentative sample of the human population (Henrich et al., 2010). To determine the generalizability of developmental science requires an examination beyond so-called WEIRD societies (Kline et al., 2018). We draw specifically from societies that have been largely unrepresented in the developmental literature – the global south.

### **The first relationship**

The significance of emotional bonds in the first year of life cannot be overstated. Human infants are born relatively helpless, requiring, and thus creating, a socially responsive caring developmental context. Bowlby noted, “It is fortunate for their survival that babies are so designed by Nature that they beguile and enslave mothers” (Bowlby, 1958, p. 367). This comment brings out the role of caregivers’ emotions in the social emotional cradle in which human infants develop. The resulting strong emotional bonds

that infants form early in life within relationships with caregivers have long term influences across the lifespan for their interaction with others (Waters et al., 2000). Attachment Theory as it was proposed and articulated by Bowlby (1958) and tested by Ainsworth (1979), transcends diverse cultural contexts and parenting goals. According to Attachment Theory, an emotional bond is necessary for healthy development. This bond is created and maintained by “responsive parenting” which is loosely defined as responding to an infant in a timely and appropriate manner. We come back to the significance of the emotional bond later in this chapter (see Mutual Joy).

### **Emotion responsiveness across cultures**

Often, responsive parenting in the first year of life is examined as appropriately timed responding to an infant’s bids. It has further been examined as affect attunement – with caregivers accurately identifying infant emotions and responding in an “attuned” manner (Stern, 1985). The idea is that through caregivers’ responsiveness and attunement to their infant needs, they become identified as a trustworthy secure base for the child. To a pre-linguistic infant, the primary mode of communication is the non-verbal sounds, movements and expressions between themselves and their caregivers, which subsequently become the foundation for further communication. Despite widespread evidence of differences in parenting practices across cultures (e.g. Whiting, 1963), there is evidence that responsiveness and emotional attunement transcend cultural boundaries. Broesch and co-authors (2016) examined contingent responsiveness and emotional mirroring by parents in Fiji, Kenya and the USA and found striking similarities between these three diverse cultural environments in caregivers’ response to their infants. There were no societal differences in the degree of caregiver responsiveness. Furthermore, the

authors examined the acoustic modifications of infant directed speech and found similarities in the ways caregivers changed their pitch and speaking rate when talking to infants (Broesch & Bryant, 2014). These findings support the idea of a universal communicative system rooted in emotions.

Within this communication process, although parents are similar in terms of their degree of responsiveness, they may differ both across and within societies in how they respond to infant emotional bids. For example, Keller and co-authors (2009) report that in more “proximal” and interdependent societies, parents respond to infants using body contact and body stimulation in contrast to parents in more “distal” and independent societies where parents typically respond to infants using face to face emotional responses – smiling and frowning while vocalizing, for example.

Furthermore, at two months of age, infants have already become embedded in these cultural models of emotion co-regulation. We see the first clear behavioral expression of this with the infant’s social smile. Cross-cultural comparisons indicate that infants begin to smile socially around the same age, yet the ways in which caregivers respond and co-regulate with their infants differs (Lavelli et al., 2019; Broesch, *in prep*). Smiling is an example of a social skill that develops within interactions (Jones, 2008), and can then be used by infants as a means to elicit further interaction (Mcquaid et al., 2009; see also Mireault, this volume for a description of this developmental process). Furthermore, evidence with infants and caregivers across diverse cultural contexts has shown that the infant response to a pause in mutually joyful social interaction (e.g., the classic “still face” paradigm) is distressing irrespective of the modality – whether the pause in social interaction is visual or tactile (Little et al., *under review*). This work, in

combination with ethnographic observations of infants in different societies (Levine et al., 1994; Lancy, 2014; Hewlett & Lamb, 2005), suggests that the focus on facial emotional responsiveness as shaping infants' emotional experience may be western-biased and not generalizable. While the infant's interactive needs are similar, the caregiver's response modality varies, depending on the society in which the infant is embedded.

Lavelli and colleagues (2019) examined mother-infant dyads during the first few months of life in three cultural contexts – rural Cameroonian Nso, urban Italy and also West African immigrant families in Italy. They found that mothers' typical response to their infants varied significantly across cultures. For example, urban Italian mothers emphasized positive vocal and facial expressions as well as sustained mutual eye gaze, while in contrast, Cameroonian Nso mothers emphasized tactile and motor responses to infant displays and appeared not to foster or support sustained mutual gaze. These findings support the idea that the infant is born into an emotional co-regulatory system which is shaped by caregiver selective emotional responses. Additionally, Little and co-authors (2016) found that mothers living on an island nation in the Pacific – Vanuatu – rely more on tactile stimulation during caregiver-infant interactions compared to mothers in the US, who rely more on facial expressions. For example, while a caregiver in the US may vocalize and smile in response to an infant, a caregiver in Vanuatu may touch and reposition the infant while vocalizing.

Research by Broesch and colleagues (2016) posit that the society into which an infant is being socialized is a determining factor in shaping caregivers' selective responses to infant emotional bids. In their work, they found that when an infant



produced a negative facial expression, they would be more likely to receive a response if they were living in a Fijian society compared to an infant-caregiver dyad in an American society. Additionally, this research also found that while mothers in Fiji, Kenya and the USA mirrored their infants' emotion expressions (affect mirroring) to a similar degree, more mothers in the USA mirrored their infant's emotions compared to Fijian and Kenyan mothers. While we do not know the direct effect of these differences, one hypothesis is that infant emotional experiences and expressions are shaped by caregiver responses. We suspect that the mechanism would operate in a similar manner to the timing of contingent responsiveness. We know that caregivers' response to infants varies and infants, in turn, develop social expectations about the timing of the caregiver response (Bigelow & Rochat, 2006). We suspect that infants are also learning from caregiver selective responses to emotional displays (as well as from observing others interacting) and this further supports any differences in emotional displays (see Broesch et al., 2016).

If we look closely at the ethnographic evidence for infant social-emotional development in the first year of life, we see further differences in caregiver responses which appear to shape the infant according to different cultural pathways of development. For example, Levine and co-authors (1994) found that the Gusii mothers of Kenya had a preference for keeping their infant calm. In this context, emotional regulation of both positive and negative emotions becomes important, as witnessed in behavioral observations. Rather than engaging in exaggerated mimicry of a positive emotional vocal or facial display, mothers responded gently and gazed away. According to Levine and co-authors, the Gusii mothers in this particular context value emotional regulation and

control over expressing one's positive and negative feelings. Therefore, mothers do not engage in stimulating positive emotions and, instead, appear to dampen positive expressions with the goal of fostering a calm, emotionally regulated infant. This suggests that our current understanding of the specifics of emotional regulation may be western biased and need revision.

### **Socialization goals across cultures**

In an elegant review article Kärtner and co-authors (2013) argue that the sociocultural model of emotional development needs reconceptualization to consider the *interpretation* of infant behaviors by caregivers in a given society. They draw upon evidence from selective responses to infant social smiling across cultures suggesting that caregivers co-regulate the infant's emotional experience (Kärtner et al., 2013). The authors suggest that the ways in which parents respond to infants is tied to their cultural orientations as adaptations to a specific eco-cultural environment (e.g. differential emphasis on autonomy and belonging), yet the process is universal.

Furthermore, Mesquita (2001) investigated understanding of emotion components in societies differentially valuing independence of an individual and interdependence amongst individuals within a group. The results of this study with adults indicated that an individual's emotion understanding is closely tied to their societal values. Mesquita reported that emotions in "collectivist" cultures were tied to the self-other relationship rather than the subjectivity of the self as in "individualistic" cultures.

### **Emotion talk across cultures**

Children's understanding of emotions develops further as they master the use of language. Words can be used to articulate and reflect on aspects of emotional experience,

yet cultures differ in which aspects of emotional experience are articulated and expanded upon (Mesquita, 2001). For example, in a study examining conceptions of emotions in three cultural groups residing in the Netherlands, differences were found between cultural groups that emphasized individualism compared to groups that emphasized collectivism. For example, in the collectivist cultures studied, emotions centered more on the self-other relationship and were taken to reflect behavior rather than an individual's inner experience, compared to individualistic cultures which emphasized inner experience (Mesquita, 2001).

Furthermore, there are cultural differences in the extent to which it is acceptable to discuss internal states and there is some evidence to suggest this impacts how children construe of others' minds (i.e. theory of mind). Work in the Pacific indicates that individuals report that it is difficult or impossible to assess others' mental states, therefore they do not engage in this activity (Mayer & Träuble, 2013). Others have found that mental state reasoning in regions of the Pacific (e.g. Vanuatu, Samoa) may follow a different developmental pathway compared to western developmental evidence. This difference has been attributed to the "opacity of the mind" in this region. The idea is that engaging in discussion of internal mental states, including the experience of emotions, violates social norms and therefore individuals refer to observable behavior and not internal experiences (Dixson et al., 2017; Mayer & Träuble, 2013; Ochs, 1988). While no one has directly investigated the impact of cultural differences in social norms regarding mental state language and the effect on emotion expressiveness and understanding, one can imagine a link. We suspect that the reduced emphasis on emotion expression leads to differences in the extent to which individuals spend time thinking about others' internal

states. In fact, a study by Taumoepeau (2015) examined ethnic identity, mental state talk by caregivers, children's emotion development and theory of mind by several Pacific cultures living in New Zealand. The author found that the strength of caregiver ethnic identity as a Pacific Islander was predictive of their children's ability to identify and predict the emotion of an individual in a vignette. The authors interpretation is that those parents were also more likely to promote social goals that emphasize consideration of others' mental states (Taumoepeau, 2015).

In urban and western societies, gender differences in development have been reported in how children talk about emotions. Such differences were found in a longitudinal study in which boys' and girls' use of emotion words at 3 years of age did not differ, but both mothers and fathers talked to their daughters more about emotions, and, by 5.5 years, girls were using more emotion terms and a wider variety of words than boys (Kuebli et al., 1995). This strongly indicates that the ways in which parents talk about emotions result in different outcomes, and suggests that we would also expect differences across cultures in adults' use of emotion words, and in turn, children's learning about emotion words. The field of emotions across cultures is large. Here we can just acknowledge its breadth and give some examples (e.g., Lillard, 1998, pp. 20-21). Just as individuals, families and genders differ in ways of talking about emotions in terms of the salience of emotional aspects of experience, as well as the variety and breadth of emotional concepts, so too do cultures vary on this dimension (Hofmann & Doan, 2018; see Liew, this volume).

### **Emotion regulation**

Children learn to regulate their emotions, partly through the ways in which their caregivers respond to their actions and emotional displays. The form of caregivers' responses is influenced by cultural values regarding the display of emotions and what aspects of emotional experience are acceptable to articulate, reflect on and acknowledge. One form of emotional regulation may emerge already in the first year or two of life through the ways in which parents respond to infants' displays of emotions. As we have noted in an earlier section, there are aspects of caregiver responsiveness that are similar across cultures (e.g., frequency and timing) and some aspects that are different across cultures (e.g., how caregivers respond). Keller and Otto (2009) investigated these cultural differences in emotion regulation and provide a model for understanding the developmental pathway. The authors propose that societal goals shape parenting goals and behavior and, in turn, this behavior is experienced and passed onto the child. They carve these cultural differences into two developmental pathways – emphasizing various degrees of autonomy and relatedness. Support for this idea also comes from research by Friedlmeier and Trommsdorff (1999), who examined emotion regulation in toddlers from Germany and Japan. The authors found differences in regulation patterns, specifically that German toddlers used more positive regulation strategies (e.g., eye contact with the mother), whereas Japanese toddlers used more negative regulation strategies (e.g., not seeking support from mother). All of this strongly suggests that early social experiences with caregivers and others, which are embedded in a given society, shape the development of emotion regulation in children (see also Liew, this volume).

### **Mutual Joy**

Emotions structure patterns of interaction in which communication and learning from others emerges (see Clement, this volume). Infants learn to enjoy the attention they receive from caregivers. This shared enjoyment in interaction becomes more complex, beginning with adults' attention directed toward infants, then to actions the infants perform, and later to objects and events. Infants gradually develop declaratives as a form of interaction based on mutual joy in which the infant and caregiver enjoy engaging around communication regarding aspects of their world (Bates et al., 1975). As Clement and Dukes describe in detail – children learn by observing and attending to others emotional expressions (see Clement, this volume). Developmental progression typically moves from holding out objects, showing, and then giving, as ways in which to illicit adults' attention, gradually leading to declarative communication. What is often overlooked in the literature on the development of communication is the feature of shared enjoyment by interactive partners. Not only does the infant or young child engage in a joint interaction, the interaction can have a positive emotional tone throughout (see Mireault, this volume). We recognize that there may be cultural differences in the ways in which this pathway develops. However, in the authors' repeated personal observations of caregivers and infants across cultures, the joyful engagement of a caregiver and an infant in the first year of life appears to transcend cultural boundaries (see also Mireault, this volume). These episodes of mutual joy likely become more complex and sensitive to cultural norms of interaction, yet this area of research has been unexplored across cultures.

## **Conclusion**

Emotions play central roles in structuring the social interaction that is critical for infant development. See also Reddy, this volume, for a clear description of the inseparability of emotions in the developmental process. Through development, emotions can become more complex, and this in turn, in a bi-directional manner, can influence the interactions children experience. Thus, emotions are crucial in the social processes that are common across cultural settings. Yet, as outlined in this chapter, these universal processes are impacted by culturally specific norms around emotion understanding, expression, and regulation. Given that there are cultural differences that appear to result in different developmental pathways of emotion development, it is essential that we address the dearth of evidence from non-western cultures. Lacking such research limits our understanding of emotion development to urban and western societies – which is not the ultimate goal of any scientific field (Broesch et al., 2020). In order to fully understand the complexity and the processes by which emotion understanding, expression and regulation develops, we need evidence from societies with a range of socialization goals and cultural norms.

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