



THE IDEA OF TEMPERAMENT:

*Does It Help Parents
Understand Their
Babies?*

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For more than 25 years, books and materials on parenting (including my own and those published by ZERO TO THREE) have instructed parents and caregivers about how to recognize their babies' and toddlers' individual temperaments. *Temperament* is a developmental term (such as *sibling rivalry* or *separation anxiety*) that has made its way into everyday conversation. But truly understanding temperament is complex and quite different from observing a baby's likes, dislikes, and indifferences. In research or clinical work, temperament is a *construct*, or a tool for cultivating knowledge. As constructs are applied with frequency, they can establish a life of their own. When this happens, researchers and practitioners may massage, stretch, or squeeze their observations in order to define what they are struggling to understand about babies and their families. Therefore, it is important to think about whether temperament is a useful construct for families.

Defining Temperament

Researchers vary in the ways that they describe and measure temperament. But most researchers would agree that temperament has a genetic/biological component (Emde, Plomin, Robinson, Corley, Defries, Fulker, et al., 1992).

Concepts such as reactivity (e.g. activity level, irritability) and self-regulation (e.g., soothability, fearfulness, behavioral inhibition) are central themes in most theories of temperament (Rothbart, 1981; Rothbart & Bates, 1998). Using these themes, researchers have refined the construct of temperament and have identified a taxonomy of distinct temperament profiles (Thomas & Chess, 1977) that are useful in describing child behavior but not as useful in understanding it. The stability of temperament from infancy through adulthood is poorly understood. According to Thomas and Chess (1986), characteristics of temperament sometimes do and sometimes do not carry over from childhood to adulthood. The continuity of behavioral style from infancy to childhood depends not only on characteristics of the child

at a glance

- Definitions of temperament vary across cultures.
- Clinicians can use discussions of temperament to help parents understand their child.
- Parents can influence an infant's temperament by learning to help an infant's self-regulation and self-comforting abilities.

but also on the dynamic interplay between the child and her primary caregiver (Sameroff & Chandler, 1975). In other words, an adequate understanding of temperament must be one in which the child is regarded within the context of her environment.

The theory of temperament profoundly changed the way in which researchers and practitioners think about infant behavior and personality. But we return to the question of whether it is a useful construct for families. In our eagerness to help, are we at risk of downplaying the dynamic complexity of babies when we discuss temperament with parents? Do we diminish the impact of parenting on child behavior? In other words, are we unintentionally being deterministic, pejorative, or at the very least too ready to label when we use the concept of temperament in our work with parents? A construct is not a fact; it is not a significant finding from a randomized controlled trial. It is a tool, useful to parents only if it is meaningful to them. This article will provide a framework for applying the construct of temperament to advance parents' understanding of child behavior, emphasize the importance of parent-child interaction, and regard cultural perspectives on infant behavior.

Defining Temperament as a Clinical Tool

Does classifying a baby's behavior according to set temperament styles actually provide insights into a baby's personality? That question is still up for debate. It is human nature to establish order and to decipher patterns. Order and classification help us master our world and guide our actions. Parents of babies and toddlers observe them and try to make sense of their behavior, as do researchers and clinicians. This is why the construct of temperament, which is fundamentally a classification system, may be attractive to parents as well as to developmentalists.

In their classic study, Thomas and Chess (1977) identified three broad categories of temperament: "easy" (even-tempered, easygoing, adaptable, and predictable); "difficult" (active, irritable, and irregular), and "slow to warm up" (inactive and moody). They found that of the 141 babies they studied, 2 out of 3 (65%) fit into one of the profiles. In 1982, Thomas and Chess reconceptualized the "difficult temperament" classification, suggesting that every child falls somewhere along a temperament continuum that ranges from easy to difficult, rather than falling into sharply demarcated categories. However, no universally accepted definition of "difficult" temperament currently exists; it remains a subjective designation.

Subjectivity in relation to difficult temperament is not just related to professionals' assessments. Mothers' ratings of difficult temperament also vary tremendously (Stifter &

Wiggins, 2004). In their research, Stifter and Wiggins assert that parent reports of infant temperament and "difficult-ness" may be influenced by factors that have nothing to do with actual infant temperament, such as socioeconomic status, depression, and maternal anxiety level.

It is clear that infant behavior, particularly persistent fussiness, can affect parent-infant interaction (Rautava, Lehtonen, Helenius & Silanpaa, 1995) and parents' feelings of self-efficacy (Lester, Boukydis, Garcia-Coll, & Hole, 1990; for a review of this work, see St. James-Roberts, 2001). As a result of these factors, infant fussiness is related to increased risk of child neglect and maltreatment (Frodi, 1981). Consequently, infant fussiness (whether a transient colicky period or a persistent temperament characteristic) merits clinical attention. And both infant and parental characteristics are important to consider in this work.

Parental response to and perception of infant crying is related to cultural factors as well as parental belief systems and infant characteristics (Leavitt, 2001). Anthropologist Meredith Small (1998) makes the point that there is no universal definition of temperament across cultures. The classification of easy or difficult temperament in infants is closely related to cultural belief systems and values. Research has shown, for instance, that babies across cultures cry at about the same frequency or initiate crying at the same rate (Barr, 1990). However, parental reactions to crying—reactions that are based on cultural belief systems and practices—may affect the length of crying episodes. In cultures where babies are carried more (e.g., in Korea and among the Kung San), crying bouts are shorter in duration than those in lower-touch Western societies (cf. Barr, 1990; Small, 1998). Additional research observing the impact of carrying on infant crying in Western samples yielded a similar result in random clinical trials. Infant crying is substantially reduced when parents increase infant carrying (Hunziker & Barr, 1986). This pattern makes the point that temperament in infancy is not static, but rather is affected by patterns of caregiving that are rooted in culture and parental belief systems.

Stability of behavior is an important feature of any definition of temperament. Temperament refers to a trait that occurs relatively early in life and becomes a stable feature of one's personality (Goldsmith, Buss, & Plomin, 1987). Families of fussy babies may view this as an elusive concept. Colic, for example, is not necessarily tied to temperament. Research has shown that babies with colic often advance beyond a certain time period and are no more fussy or difficult than noncolicky babies (Elliot, Pederson, & Morgan, 1997; Stifter & Braungart, 1992). Babies who experience colic and continue to be fussy and unpredictable (or dysregulated) are qualitatively different than

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babies whose colic had been resolved by 3 to 4 months of age (Fox & Polak, 2001). For this reason, clinicians who work with very young infants and their families must be careful not to speak diagnostically about temperament, as early signs of colic may not be predictive of later developmental difficulties.

Using Temperament as an Effective Clinical Tool With Parents of Fussy Babies

Classifications of temperament are useful for describing behavior but are not particularly helpful in understanding infant behavior. Regulatory ability may be a more useful tool in understanding differences across infants. Self-regulation is the infant's gradual transition from dependence to independence. This transition is reflected by a baby's ability to be soothed by caregivers. Later, it is reflected in a baby's independent soothing (such as sucking, or using a blanket or object to self-soothe) and adaptation to routines (such as following a consistent sleep-wake cycle). (For more comprehensive definitions of infant self-regulation, see Bronson, 2000, and Kopp, 1982.) Most comprehensive definitions of temperament include self-regulation as a key element of infant behavior, particularly the stable indicators of self-regulation (Rothbart, 1981; Rothbart & Bates, 1998). This makes sense because the fundamental measure of temperament is reactivity—or how babies respond to stimulation. In work with very young infants, regulatory ability may provide a more useful and unbiased way of helping parents understand their baby's behavior than the construct of temperament. The argument could be made that it is not temperament that is hardwired into a baby's brain, but regulatory skill (cf. Lester et al., 1990). These two constructs are not mutually exclusive. Temperament could be thought of as a classification of regulatory skill—a classification that must be flexible enough to account for the influence of caregiving and other environmental events. Discussing infant behavior style as reflective of self-regulatory skill may be more specific and practical (from



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the daily caregiving perspective) than categorical temperament classifications such as “easy”, “difficult”, and “slow to warm up.”

There are ways in which the construct of temperament, if modified, can be useful as an element in clinical work with families of fussy babies. Table 1 presents general guidelines for applying constructs with families.

Guideline #1: Clinicians should avoid using constructs in a pejorative or judgmental way when working with families. In work with very young infants, it may be too early in the

TABLE 1: GUIDELINES FOR APPLYING DEVELOPMENTAL CONSTRUCTS IN A USEFUL WAY FOR FAMILIES

1. Clinicians should avoid using constructs in a pejorative or judgmental way when working with families.
2. Constructs such as temperament are clinically helpful only if they enhance the quality of the parent-child relationship.
3. Clinicians should remember that constructs, if they are used in clinical work with families, must be more descriptive than deterministic; otherwise, parents may view these constructs as labels.
4. Clinicians should ensure that constructs are practical: They must be useful to parents in helping them understand their child and her behavior.
5. Parents must embrace the construct or it is not useful in clinical application.

child's development to talk about temperament in a categorical way such as "difficult" or "easy." It may be more effective to observe the baby with her parents and describe the behavior as her "way of being" right now, emphasizing that temperament is not necessarily fixed but can be altered by caregiving.

Cultural factors must also be considered in discussing temperament with families. Infant crying, for example, is viewed through the lens of culture. What may be regarded as fussiness in one culture may be considered normal, or "delightfully robust," in another. Clinicians should acknowledge and not override cultural definitions of infant temperament. Biased by our affluent culture, we in Western society may have lost sight of the adaptive significance of infant crying (Lummaa, Vuorisalo, Barr, & Lehtonen, 1998). For example, the sound of infant crying stimulates the milk-let-down response in mothers, promoting nutrition and mother-child closeness (Lind, Vuorenkoski, & Wasz-Hockert, 1972). Dutch researcher Marten deVries (1987) applied the Western categories of temperament ("easy," "difficult," and "slow to warm up") in his work with the Masai in Kenya. During his research, the community experienced a devastating drought, which severely compromised food and other resources. When deVries returned to the community after a 3-month absence, he found that the babies with a "difficult" temperament were more likely to have survived than the quieter, "easy" babies. Responding to this research, Meredith Small (1998) makes the point that it is not feasible to extend the categories of temperament across cultures because the categories mean different things in different societies. In our Western society, excessive crying is a risk factor that may threaten infant well-being (Frodi, 1981). Yet members of economically disadvantaged societies interpret infant crying as advantageous to survival. When appreciated from an anthropological perspective, infant crying may help parents recognize a silver lining during the cloudiness of a colicky period.

Guideline #2: Constructs such as temperament are clinically helpful only if they enhance the quality of the parent-child relationship. By discussing genetic contributions to behavior, parents can learn to appreciate the uniqueness of their baby and can be encouraged to observe their baby to discern patterns in his behavior. In the case of fussy babies, parents may also feel relieved of guilt, or blaming themselves for their baby's fussiness, if they understand that genetics affect a baby's regulatory ability. Clinicians must, however, emphasize the profound impact that caregiving has on infant behavior, particularly regulatory skills (Greenspan, 1999).

Maternal emotional and affective factors mediate caregiving and can actually have an influence on infant tem-

perament, reflected by fussiness and regulation. For example, babies of stressed mothers are fussier and do not sleep as well as babies of calmer mothers (Miller, Barr, & Eaton, 1993). As parents begin to reduce their tension around their baby's crying and as they begin to see themselves and their baby as efficacious in communicating, responding, and promoting regulation, the result may be a more relaxed, calm baby, leading to a more synchronous interaction between baby and caregiver.

Another goal of clinicians working with caregivers of fussy babies is to teach parents to recognize the *good* in their baby even if they feel stressed listening to his cries. It may be helpful for parents to see that infant crying is a potent form of communication that may even presage later positive quali-

ties. For this reason, it is useful to substitute negative descriptions of infant behavior (such as "difficult") with neutral or positive descriptions of response (or regulatory) behaviors. For example, the clinician may simply describe the things that seem to make the baby cry and ways in which he is effectively comforted by his caregiver. With effective clinical intervention, parents can be encouraged to reframe infant crying and bring out the best in their baby by responding sensitively to his cues and signals. Clinical work that focuses on synchrony of affective exchanges and sensitive responding to infant crying contributes to the essential importance of "goodness of fit" between infant and parent.

Guideline #3: Clinicians should remember that constructs, if they are used in clinical work with families, must be more descriptive than deterministic; otherwise, parents may view these constructs as labels. An applied construct is clinically effective only if it promotes parents' understanding of their infant's behavior and guides caregiving and interaction in everyday contexts. Consequently, when addressing infant behavior that occurs during the first few months of life, self-regulation may be a more efficient construct than categorical definitions of temperament. Self-regulation ability can be observed and may also seem less fixed to parents than categorical temperament classifications. Clinicians may find this application to be useful in assisting parents with facilitating their baby's transition from co-regulation (external soothing) to self-regulation (self-soothing). For example, parents can be encouraged to observe their baby's typical ways of self-soothing and actively facilitate their baby's mastery of this skill.

Guideline #4: Clinicians should ensure that constructs are practical: They must be useful to parents in helping them understand their child and her behavior. By shifting the emphasis from discrete temperament classifications to the role of infant self-regulation on behavior, parents of infants can begin to recognize and nurture the infant's own capabilities

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for guarding against overstimulation and promoting self-comfort. With time, parents may even begin to recognize that crying may serve a protective function and in itself may be a regulatory function. Brazelton (1990) points out that the customary peak in crying that occurs in the early evening may help babies “let off steam.” After this “release crying,” babies often sleep better and feel refreshed the next day. In this context, parents can begin to recognize that infant crying, although stressful to hear, is not all bad. In fact, crying is evolutionarily advantageous in certain environments (e.g., during times of nutritional deprivation) and under certain circumstances (e.g., overstimulation).

Guideline #5: Parents must embrace the construct or it is not useful in clinical application. As clinicians, we must meet parents where they are. It is essential that we listen carefully and discern parents’ specific concerns. We must not assume that they want to address the same issues that concern us. With regard to temperament, there is evidence that parents and psychologists may not necessarily focus on the same infant behaviors. A study by Klonoff-Cohen and Edelstein (1995) showed that parents identify sleep behavior as the primary criteria for determining an “easy” versus a “difficult” baby; psychologists, however, use a much broader spectrum of behaviors to classify temperament.

The construct of temperament is useful for clinicians in framing infant behavior and is a particularly valuable tool for research. Clinicians may also find the construct of temperament helpful if they use it wisely in their work with parents of fussy babies. However, people who work with families should apply the construct of temperament cautiously. This application must reflect our respect for babies’ individual differences and our appreciation of the flexible nature of infant behavior—all within the context of the infant-caregiver relationship. ♪

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