Temperament in the Pediatric Visit

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Temperament lies behind mood; behind will, lies the fate of character. Then behind both, the influence of family the tyranny of culture; and finally the power of climate and environment; and we are free, only to the extent we rise above these.

—John Burroughs

Learning Objectives:
1. Define temperament and its theoretical components
2. Distinguish temperament from behavior
3. Learn to use discussions of temperament to engage parental concerns

Primary Reference:

CASE ONE:

Mia Crier is a 3-month-old girl who presents for a well child check. Her mother reports that she is constipated and gassy. On further questioning, you find that Mia has 2 soft stools daily that are normal in appearance, consistency, and amount. Her mother believes she is constipated because she cries “all the time.” During the rest of the history and physical exam, you determine that Mia is physically well with a benign abdominal exam.

1. What is temperament? What are thought to be the major components of temperament?

Though pediatric providers often engage parents on the subject of their children’s behavior, temperament is a concept that is often unaddressed in the well child visit. Theories on temperament and its interactions with various parts of child development and behavior have ranged from common-sense to controversial. Despite this wide array of ideas, temperament can be generally thought of as the orientation of a person, influencing the way he or she self-regulates and reacts in different situations, possibly based on biochemical sensitivity to reward and punishment. It is related to how a person feels about and responds to the world around them, and the world inside them, and is therefore associated with both emotions and behavior. Temperament is thought to be largely stable over a lifespan.

The heritability estimate of 0.5-0.8 for broad dimensions of temperament indicates that it is largely based on genetic makeup, which likely dictates the individual’s biochemical sensitivity to reward and punishment. The experience of environmental and social interactions from early in life further shapes that person’s responses to future stimuli.

Most researchers define dimensions such as impulsivity/self-control, high/low positive emotionality, and high/low negative emotionality, among others. Though many combinations are possible, Chess and Thomas posited three “clusters” of children representing major temperament types. Around 40% of children fit into an “easy” category, while 15% are “slow to warm up,” and 10% are “difficult.” “Easy” children are described as cheerful, adaptable, and open to new situations. They have a high threshold of responsiveness and predictable sleep-wake-eat cycles. “Slow to warm up” children, however, are found to be careful, to have low adaptability to new situations, to have difficulty separating from parents and to have milder responsiveness. “Difficult” children represent those who are cranky or fearful, have low adaptability and short attention span, have disordered sleep-wake-eat cycles, and have a low threshold for responding intensely. Such a categorization of children is both a gross
oversimplification and potentially harmful in that children could be labeled and thus dismissed or inappropriately treated. However, if used carefully, it may be useful in understanding, and helping caregivers to understand, the nature of their children’s temperament and thus how to best interact with their child.

2. **How does temperament influence parenting?**

Caregiver and child temperament likely influence each other as each person interacts with the other. The caregiver’s temperament, how the caregiver was him- or herself parented, and experiences since childhood all interact to form the caregiver’s outlook, relationship with, and behavior towards the child, called parenting. On the child’s part, he or she will be reacting to the caregiver’s outward signals and directions based upon his or her own temperament. While a biological parent and child share much of their genetic makeup, and may, for example, both be inherently more anxious, some of the actions of an anxious caregiver serve as a model for behavior of the child, and thus the child may incorporate anxious behaviors even if these are not initially temperamentally based. In other words, parenting and the child’s reactivity to a caregiver’s shaping attempts may overlay both genetics and modeling effects.

3. **When faced with a problem relating to temperament, what further questions do you need to ask, or observations do you need to make, in order to clarify the problem? What tools can you use?**

Because of the brevity of well child visits, it is often difficult for a provider to come to an understanding of the patient’s temperament. Clues often come from the answers given to routine questions regarding eating, sleeping, toilet training, behavior, and discipline. Also, observation can be helpful in determining which characteristics may be primary in a child’s temperament. These include observations of the child, the caregiver, and the interactions between them. The affective presentation of an angry, sad, or distressed caregiver can provide useful information in the assessment of temperament. Such observations can begin even in the newborn nursery, thus becoming a part of discharge anticipatory guidance.

CASE continued:

On further questioning, you learn that Mia’s mother has a hard time with her crying, and states she gives extra bottles in between her regular feeds just to quiet her. Everything seems to upset Mia and make her cry. Her mother tearfully admits that she is overwhelmed and feels guilty that she is not a good parent.

4. **Besides Mia’s temperament, what may be at play in the interaction between Mia and her mother?**

As health care providers, we encounter only a small part of our patients’ life experience in the office. Multiple influences are at play in caregivers’ interactions with their child, and some of these may be important to draw out in a pediatric visit. Asking open-ended questions, such as “what do you think may be going on with Mia’s behavior?” or “what role do you think her [other caregivers] may be playing in this problematic behavior?” may help draw out concerns that caregivers could use help with or simply may want to voice. Finding out what other stressors exist in the home may provide crucial cues into a caregiver’s parenting. In addition, these historical points will give the provider an understanding about the caregiver’s own temperament, and how it will fit in with the child’s.

5. **How does temperament impact Mia’s relationships with her mother, herself, and the world?**

Temperament plays an important role in a child’s life. It impacts a child’s relationships with her caregivers, and how she feels about herself and the world. Caregivers are affected in their self-assessment as successful, how they interact with and how they feel about their child.
In studies, mothers of infants seen as irritable were less involved and responsive to their infants, which then served to increase the infants’ irritability. When an intervention aimed at increasing maternal responsiveness was tested, the infants’ irritability decreased.

Temperament also plays a large role in infant and child development. It has been shown to impact socialization from infancy, physical aggression in infancy and beyond, school performance, and the frequency of physical punishment. Studies have demonstrated links between temperament and difficult toilet training and temperament and recurrent abdominal pain, and links between temperamental dimensions and eating patterns, stuttering, anxiety, depression, and eating disorders are under investigation.

6. **What might you discuss with the mother to help the situation?**

The crying infant offers a key opportunity to discuss temperament with caregivers. Crying infants described as “colicky” or “difficult” have been known to drive caregivers to exhaustion. Caregivers often blame themselves for the infant’s crying, feel inadequate and abnormal, or come to believe that something is wrong with the child. This can escalate as parents get more irritated and scared, acting in a non-soothing manner. This stressful interaction may lead to harmful outcomes, such as overfeeding and even shaken baby syndrome. One of the most important interventions in early infant well child visits involves discussions with caregivers regarding the normalcy of crying, relative blamelessness of the caregivers, and safety surrounding the care of infants when caregivers are exhausted to the breaking point.

As the infant grows past the peak crying time of 2 months and continues to cry frequently, remains difficult to settle, has disrupted sleep-wake-eat cycles, and is generally irritable, talking with caregivers about colic and temperament is crucial. If caregivers understand that the behavior of their child is to some extent innate, they may decrease their guilt and change their expectations surrounding the situation. When they understand the stimuli that may be involved in their child’s reactions, they may be able to adjust the environment accordingly. In Mia’s case, as she is quick to have an intense negative reaction to stimuli, you could suggest that her mother modulate her actions towards the baby by approaching her more slowly and handling her more carefully; she could decrease noise in the house, or could change the physical environment (lighting, color) depending on her ability to observe what seems to upset Mia most.

**CASE TWO:**

Mr. and Mrs. Wermup are concerned because when they bring their 3-year-old daughter Sloan to daycare, she holds onto their legs and pleads, “Please no daycare.” They have to peel her off and leave her crying with the teacher so that they can get to work on time. The teacher reports that five minutes after they leave, Sloan stops crying and sits on the ground watching the others play. Over the next ten minutes, she gradually integrates with the other children. She is generally fine throughout the day, but has some difficulty with transitions between activities. The parents are worried that they are somehow responsible for the way she behaves.

7. **How would you describe her attachment to her parents? What can you say about her temperament? Are there any strategies you could offer the parents?**

This child seems to be securely attached to her parents. For her, daycare and transitions appear to be a stressful experience and she seeks comfort in her caregivers. Although she has some difficulty with separation, she is eventually able to be part of the daycare environment with only small difficulties during transitions. She appears to fall into the slow-to-warm up category of temperament. Although, it is difficult to fully assess the parents’ role in the interactions, much of temperament is thought to be innate and the dynamic between parents and children related to “goodness of fit” between a child’s temperament and parents’ reactions and expectations.

About 20% of the population have “slow to warm” or “behaviorally inhibited” temperament styles. It is known that for some (but certainly not all) people, this is a risk factor for later development of more
significant anxiety problems, particularly if there is a strong family history of anxiety disorders. Some children who present as very shy or socially anxious may withhold speech outside the home. Known as “selective mutism,” this condition has recently been classified as an anxiety disorder in the DSM 5 and can be extremely impairing for children. If this is suspected, prompt referral for intervention is critical. While children may be anxious and quieter than usual in the medical office, if a clinician encounters a child who does not speak at all it is worth asking the parent further about use of speech in other settings.

In Sloan’s case, it would be helpful to suggest that the parents keep a consistent routine for her and give her advanced warnings before transitions occur. The parents should attempt to pick her up and drop her off at the same time each day. It might be helpful if the parents could spend a few minutes at the daycare with her and inform her a few minutes before they leave that they will have to say goodbye soon. They should demonstrate that they are confident that daycare or school is a good place for the child to be, even if they are concerned that this is not so. To help convey this message, they could state that they are going to leave rather than put it in the form of a question. For example, they could say with conviction, “Mommy and Daddy are going to go now,” instead of “Mommy and Daddy are going now, is that okay?” One must recognize that leave-taking can be difficult for a parent as well and that they may be concerned that they are not doing the best thing for their child by leaving her at daycare.

It is sometimes helpful to provide the child with a transitional object (something from home that belongs to the parent or child) that she can keep at daycare as a way of psychologically connecting her to a familiar and secure environment. One could coordinate with the teacher to have a special job for the child to do when she first gets to daycare, such as water a plant or help set-up a class activity.

CASE THREE:

Tristan is an 8-year-old boy who is obese but otherwise growing and developing well. He presents to a visit with his father, who relates his concern that Tristan is “always afraid,” withdraws from social situations, and clams up instead of responding when spoken to. This frequently irritates his parents, who address this by engaging him in many extra-curricular activities, and spend a lot of time trying to teach him new things. In the room, Tristan is a quiet, shy boy who speaks in a low voice and keeps his eyes down. When his father leaves the room briefly to take a phone call, he initially looks startled, then again looks down. While alone, he endorses being bullied at school and states that he doesn’t like his after-school activities because the other kids say he is fat and he can’t keep up in sports. He tells you he sometimes wets the bed, but is afraid to tell his parents. He is not being hurt in any physical way. When the father re-enters the room, you discuss some of Tristan’s concerns with him and he immediately starts berating Tristan for not telling him. His voice gets louder and louder as Tristan turns brighter shades of red and you notice a tear is rolling down his cheek.

8. What is “goodness of fit” and how can it affect a child, caregiver and their relationship?

“Goodness of fit” refers to the complementariness of a child’s and a caregiver’s temperament. An interaction between a caregiver and a child can be facilitated by a “good fit,” or made difficult by a “bad fit.” That is, conflicting temperaments in caregivers and children can lead to more frequent and more difficult interactions, while temperaments that fit well together are more likely to lead to fewer conflicts and therefore easier interactions between caregiver and child. Also, caregivers can misunderstand a child’s “abnormal” behavior based on their own temperament. Gender, socioeconomics, and culture play a large role in self-understanding and the environment into which a child must “fit.” It is therefore important to recognize that some of the family’s views on temperament and behavior may be vastly different from your own.

Tristan, like Sloan in the prior case seems “slow to warm up” and a child such as this may feel threatened by a loud, outgoing father, thus becoming more fearful and increasingly withdrawing from public situations. In turn, the father may feel annoyed and upset when his child responds negatively to his overtures and increasingly withdraws. The father may feel guilty for his child’s behavior and his
own response, blaming himself and thereby reacting more strongly causing even more conflict. He may describe his child as cold, unloving, antisocial, shy, or always afraid. Helping this father to understand his child’s temperament can have a large impact on such situations. If he were to understand that his child is “slow to warm up,” and that this is a fixed state that will influence his behavior, he might feel more forgiving about the child’s withdrawal and fearfulness. This realization may allow him to also feel better about himself and his parenting, and he may be able to act towards the child in a way that facilitates “warming up.” You might suggest that he try to approach his child in a calmer manner, defer negative feedback until he is calmer, or allow the child to experience new situations slowly instead of all at once.

9. When is it appropriate to address temperament and how would you approach such a discussion?

Discussions about temperament can be interspersed throughout a visit. A thorough history and keen observation allows the provider to help guide the caregivers towards a better understanding of their child’s temperament and how best to “fit” with it; that is, how best to help the child to thrive given his or her innate characteristics. Alternatively, if a caregiver is reporting a problem, the provider may specifically address temperament and “goodness of fit,” along with insights and recommendations regarding how changes in caregiver behavior and environment may facilitate their child’s growth, development and socialization. Stressing the fixed nature of temperament and the blamelessness for a “poor fit” is important and is often reassuring to caregivers. Starting discussions on temperament early in infancy can allow caregivers to develop a better understanding of their children. It is important that caregivers believe the provider is a resource for questions regarding temperament. Behaviors may be addressed and modulated by changing parenting styles, discipline, environments of care, and addressing other contributing factors such as social stressors or educational needs.

Additional References:

Resources:
1. Links to AAP parenting articles on temperament.
   http://www.healthychildren.org/English/ages-stages/gradeschool/Pages/How-to-Understand-Your-Childs-Temperament.aspx
   http://www.healthychildren.org/English/ages-stages/gradeschool/Pages/Your-Childs-Temperament.aspx

3. Carey Temperament Scales, for use by providers. [www.temperament.com/ctsindex.html](http://www.temperament.com/ctsindex.html)