Center on the Social and Emotional Foundations for Early Learning

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Understanding Temperament in Infants and Toddlers

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What Works Brief Series • Lindsey T. Allard and Amy Hunter

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Twenty-month-old Laura just began care in Ms. Neil's family child care home. Ms. Neil is having difficulty integrating Laura into her program. Laura's schedule is unpredictable—she becomes tired or hungry at different times each day—and she always seems to want to run, climb, and jump on everything. Laura also gets extremely upset when it is time to transition from outdoor play to lunch, or when Ms. Neil interrupts an activity in which Laura is engaged. It is not uncommon for her to tantrum for 10 minutes or more at these times. Ms. Neil has had many years of experience working with young children, and attributes Laura's lack of a consistent schedule to her recent enrollment and need to get used to the program. She is also struggling with the fact that her favorite activities—quiet games, book reading, and sensory experiences—are ones that Laura doesn't seem to enjoy. After several weeks of observing little change in Laura's behaviors, Ms. Neil is frustrated. Laura's unpredictable napping and feeding times, as well as her constant need for physical activity and intense reactions during transitions, are making responsive care for all the other children difficult. Ms. Neil meets with Laura's family, and learns that Laura's parents haven't had difficulty with the issues she describes. When she asks specifically about her schedule, her parents describe Laura as being a good eater and sleeper, but do report that she doesn't have a consistent schedule for eating or napping. They also share that Laura's need for active physical play is typically not an issue because they have a large backyard and Laura has several older siblings who often include her in their active play. Still, all of the adults are concerned about Laura's success transitioning into Ms. Neil's program, and want to find a way to help her.

What Is Temperament?

A child's temperament describes the way in which she approaches and reacts to the world. It is her personal "style." Temperament influences a child's behavior and the way she interacts with others . While temperament does not clearly define or predict behavior, understanding a child's temperament can help providers and families better understand how young children react and relate to the world around them. Information about temperament can also guide parents and caregivers to identify children's strengths and the supports they need to succeed in their relationships and environments.

Researchers have described young children's temperament by depicting several different traits. These traits address an infant's level of activity, her adaptability to daily routines, how she responds to new situations, her mood, the intensity of her reactions, her sensitivity to what's going on around her, how quickly she adapts to changes, and how distractible and persistent she might be when engaging in an activity . Based on these traits, researchers generally categorize children into three temperament types:

- **Easy or flexible** children tend to be happy, regular in sleeping and eating habits, adaptable, calm, and not easily upset.
- **Active or feisty** children may be fussy, irregular in feeding and sleeping habits, fearful of new people and situations, easily upset by noise and stimulation, and intense in their reactions.
- **Slow to warm or cautious** children may be less active or tend to be fussy, and may withdraw or react negatively to new situations; but over time they may become more positive with repeated exposure to a new person, object, or situation.

Clarifications about Temperament

Not all children's temperaments fall neatly into one of the three types described. Roughly 65% of children can be categorized into one of the three temperamental types: 40% are easy or flexible, 10% are active or feisty, and 15% can be categorized as slow to warm or cautious. Second, all temperamental traits, like personality traits, range in intensity. Children who have the same temperament type might react quite differently in similar situations, or throughout different stages in their development. For example, consider the reactions of two infants when a stranger comes into the room. A cautious infant might look for her caregiver and relax when she makes eye contact, while another baby with an easy temperament may smile or show little reaction to the stranger. In thinking about Laura's reactions and behaviors in Ms. Neil's care, might you categorize her temperamental type as feisty?

Finally, it is important to understand that although a child's basic temperament does not change over time, the intensity of temperamental traits can be affected by a family's cultural values and parenting styles. For example, a family that values persistence (the ability to stick to a task and keep trying) may be more likely to praise and reward a child for "sticking with" a challenging task (such as a puzzle). Parental recognition of the child's persistent efforts can strengthen the trait, and she may become more persistent and more able to focus over the course of his childhood.

A child's temperament is also influenced to some extent by her interactions with the environment. For example, if a child is cared for in an environment that places a high priority on scheduling predictable sleeping, eating, and diapering/toileting experiences, a child whose biological functions are somewhat irregular might, over time, begin to sleep, eat, and eliminate more regularly. It is important to know that adults cannot force a change to a child's temperament; however, the interaction between the child's temperament and the environment can produce movements along the continuum of intensity for different traits.

Why Is Temperament Important?

Temperament is important because it helps caregivers better understand children's individual differences. By understanding temperament, caregivers can learn how to help children express their preferences, desires, and feelings appropriately. Caregivers and families can also use their understanding of temperament to avoid blaming themselves or a child for reactions that are normal for that particular child. Most importantly, adults can learn to anticipate issues before they occur and avoid frustrating themselves and the child by using approaches that do not match her temperament.

Ms. Neil visited Laura in her own home and observed that Laura is constantly trailing behind her older siblings, and runs inside and outside the house with few limitations. The household is a relaxed environment, where the older children help themselves when they are hungry, and Laura's mother responds to Laura's hunger or need for sleep whenever they arise. In contrast, Ms. Neil's program functions on a very consistent schedule, which she feels is important in preparing children for their later school experiences. Ms. Neil does not have much space indoors, and she finds outdoor play somewhat difficult to manage with children at varying ages and developmental levels. While Laura's family's pattern of behavior seems to be a match to her temperament, Ms. Neil's home does not currently represent a good "fit" for Laura, who might be categorized as active or feisty.

Developing a "Goodness of Fit"

One important concept in care that supports healthy social-emotional development is the notion of "goodness of fit." In the previous example, Laura's activity, intensity, and unpredictability may reflect a mismatch between her temperament and Ms. Neil's caregiving style and environment. A caregiver can improve the goodness of fit by adapting his or her approach to meet the needs of the child.

Using What You Know About Temperament to Promote Positive Social-Emotional Development and Behavior

You can use your knowledge of temperament in many ways to support positive social-emotional development in the infants and toddlers you care for:

1. ***Reflect on your own temperament and preferences. Understanding your own temperament can help you to identify the "goodness of fit" for each child in your care.*** Knowing more about your own temperament traits will also help you to take the child's perspective. For example, a caregiver who enjoys movement, loud music playing, and constant bustle might try to imagine what it would feel like to spend all day in a setting that was calm, hushed, and quiet. This reflective process can help you become more attuned to the experience of each child within your care. You can then determine what adjustments might be needed to create a better fit for each child.

2. ***Create partnerships with families to understand a child's temperament.*** Share what you have learned about temperament with the families you serve, and provide information about temperamental traits. Talk about what each temperamental trait describes, and ask parents to help you understand their child's activity level, response to new situations, persistence, distractibility, adaptability, mood, intensity, sensitivity, and regularity so that you can learn about the child's temperament and the family's cultural values (see Temperament Continuum handout attached). For a better understanding of how these traits look in young children, work with families to identify their child's individual temperament.

   Refrain from judging a child's temperamental traits as "good" or "bad" behavior, and work with parents to see each child's approach to the world through a positive lens. Understand the contribution each child's temperament type makes to the group. The active or feisty children are often leaders and creators of games, or initiators of play. The slow to warm or cautious child may observe situations carefully and help you notice things you hadn't seen before. The flexible or easy child may take new play partners on easily. Support each child's development by recognizing, valuing, and integrating the unique traits that each child has, rather than trying to change a child's temperamental traits.

   Listen to how the family feels about the temperament characteristics of their child. For example, if a child's temperament makes his sleeping routines irregular, but his family is consistently trying to get him to nap at 1:00 PM, he may be frustrated by expectations that don't fit with his temperament. This frustration, if not understood, might result in conflict between the parents and the child, or result in him demonstrating challenging behaviors at home or in care. Share with families what you have learned about goodness of fit, and share your strategies, such as individualizing nap schedules for your program. As you learn which traits are highly valued by each family, you can partner with them to determine an appropriate balance between the child's temperament, the family's preferences, and the policies of the program.

3. ***Respect and value each child's temperament when individualizing your curriculum. Recognize how quality caregiving practices support all children's development, yet certain practices might be especially important for certain temperament types.***

   A) For the **easy or flexible** child, ensure that you often check in with her, and initiate communication about her emotions. She might be less likely to demand attention and make her needs or distress known.
   - You can use language to develop her awareness and understanding of her own emotions, feelings, and reactions. Make sure she knows that her feelings and preferences are recognized and validated.
   - Encourage her to seek help when he needs it, and work with her to communicate his feelings and needs to others. "When Jack takes your block, you can tell him, 'I am using that.'"

   B) For the **active or feisty** child, be prepared to be flexible and patient in your interactions. A child who is feisty can experience intense emotions and reactions.
   - Provide areas and opportunities for her to make choices, and engage her in gross-motor and active play to expend high energy levels. Feisty children might need a peaceful environment in order to help them calm themselves and transition from playtime to rest or naptime.
   - When preparing children for transitions, pay special attention to individualized transition reminders for feisty children by getting down on the child's level and making sure that the child hears and understands what will happen next in order to ensure smooth experiences throughout the day.
   - Label children's emotions by describing what they seem to be feeling ("You are so angry. You really wanted that toy.") Stay calm when faced with the child's intense emotions. Reassure him by acknowledging her feelings, and also point out to her when he is calm so he can learn to recognize his emotions on his own as she grows.

C) For the **slow to warm or cautious** child, provide additional preparation and support for new situations or people who become part of his environment.

- Set up a predictable environment and stick to a clear routine. Use pictures and language to remind the cautious child what will happen next. Drop-off and pick-up might also require extra time from you in order to support the cautious child.
- Give children who are cautious ample time to establish relationships with new children or to get comfortable in new situations. Primary caregivers, who can provide a secure base to all children, are particularly important for a cautious child. Help her in unfamiliar situations by observing her cues carefully, and providing support and encouragement for her exploration and increasing independence. (e.g., "I'm here. I'll be right in this chair watching you try on the dress-up clothes").

Each child's response to the environment will vary in intensity. Over time, temperamental traits might increase or decrease in intensity. As children grow, develop, and learn to interact with others, the environment, and their families, shifts in temperament might occur. This means caregivers must continue to observe children many times and in different contexts to ensure that their needs are being met. The importance of adapting strategies in order to create a goodness of fit and meet the unique needs of the children and families in care, as Ms. Neil does below, cannot be overstated.

Ms. Neil reflected on her own temperament and how it might affect the children in her care, each of whom had their own distinct temperaments. She realized that she values a predictable schedule and is most drawn to calming, quiet activities. By developing a partnership with Laura's family, she learned more about Laura's home and her unique temperament traits. She was then able to better understand Laura's reactions and behaviors while in care. Ms. Neil began to organize additional outdoor play and active opportunities in her schedule. She watched Laura closely and learned to recognize her need to sleep or eat, and made accommodations to individualize eating and sleeping schedules for her. She offered Laura many advance reminders when transitions were about to take place, and was patient and understanding when she experienced intense emotions. Soon, Laura appeared to be much more comfortable in Ms. Neil's family child care home, and was able to better use her energy to build strong and positive relationships with Ms. Neil and the other children. Through understanding herself, the children, and their families' temperament, Ms. Neil created an environment that better met all of the children's needs. Ultimately, the work she did positively impacted the experience of Laura and the other children in her care.

Who Are the Children Who Have Participated in Research on Temperament?

Research in temperament has blossomed in the last 15 years through the efforts of literally hundreds of scientists in many disciplines. Studies that attempt to understand facets of temperament in children have been conducted in a number of countries and with a wide variety of ethnically and linguistically diverse children. Participants in these studies have included children from European, American, Chinese, and Sub-Saharan African backgrounds. Research on temperament has been conducted with children and families in home and child care settings. ☼

What Is the Scientific Basis for the Strategies?

For those wishing to explore the topic further, the following resources might prove useful:

Bridgett, D. J., et al. (2009). Maternal and contextual influences and the effect of temperament development during infancy on parenting in toddlerhood. *Infant Behavior & Development.* 32(1), 103-116.

Carey, W. B., & McDevitt, S. C. (1994). *Prevention and early intervention. Individual differences as risk factors for the mental health of children.* New York: Brunner/Mazel.

Chess, S.. & Thomas, A. (1996). *Temperament theory and practice.* New York: Brunner/Mazel.

Chess, S., & Thomas, A. (1999). *Goodness of Fit.* New York: Brunner-Routledge.

Hwang, A., Soong, W., & Liao, H. (2009). Influences of biological risk at birth and temperament on development at toddler and preschool ages. *Child: Care, Health & Development.* 35(6), 817-825.

Klein, V., et al. (2009). Pain and distress reactivity and recovery as early predictors of temperament in toddlers born preterm. *Early Human Development.* 85(9), 569-576.

Pitzer, M., Esser, G., Schmidt, M., & Laucht, M. (2009). Temperamental predictors of externalizing problems among boys and girls: a longitudinal study in a high-risk sample from ages 3 months to 15 years. *European Archives of Psychiatry & Clinical Neuroscience.* 259(8), 445-458.

Rubin, K. H., Burgess, K. B., Dwyer, K. M., & Hastings, P. D. (2003). Predicting preschoolers' externalizing behaviors from toddler temperament, conflict, and maternal negativity. *Developmental Psychology.* 39(1), 164-176.

Thomas, A., Chess, S., Birch, H. G., Hertzig, M. E., & Korn, S. (1963). *Behavioral individuality in early childhood.* NewYork: New York University Press.

Van Aken, C., et al. (2007). The interactive effects of temperament and maternal parenting on toddlers' externalizing behaviours. *Infant & Child Development,* 16(5), 553-572.

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Temperament Continuum

HANDOUT 23

Place the initials of each of the children in your care on the continuum for each trait based on your observations and discussions with the child's family. Then, write your initials where you feel you fall on each trait in the continuum. Use this tool to analyze where your temperament is similar and different to the children you care for. Then, knowing that it is the adult who must adjust to make the "fit" good, use the suggestions above to create care strategies that provide the best possible experience for each child.

☼ Activity Level:

Very Active
wiggle and squirm, difficulty sitting still

Not Active
sit back quietly, prefer quiet sedentary activities

☼ Distractibility:

Very Distractible
Difficulty concentrating
Difficulty paying attention when engaged in an activity
Easily distracted by sounds or sights during activities

Not Distractible
High degree of concentration
Pays attention when engaged in an activity
Not easily distracted by sounds or sights during activities

☼ Intensity:

Very Intense
Intense positive and negative emotions
Strong reactions

Not Intense
Muted emotional reactions

☼ Regularity:

Very Regular
Predictable appetite, sleep patterns, elimination

Not Regular
Unpredictable appetite, sleep patterns, elimination

☼ Sensory Threshold:

High Threshold
Not sensitive to physical stimuli including sounds, tastes, touch, temperature changes
Falls asleep anywhere, tries new foods, wears new clothing easily

Low Threshold
Sensitive to physical stimuli including sounds, tastes, touch, temperature changes
Picky eater, difficulty sleeping in strange crib/bed

☼ Approach/Withdrawal:

Tendency to Approach
Eagerly approaches new situations or people

Tendency to Withdraw
Hesitant and resistant when faced with new situations, people, or things.

☼ Adaptability:

Very Adaptable
Transitions easily to new activities and situations

Difficulty Adapting
Has difficulty transitioning to new activities or situations

☼ Persistence:

Persistent
Continues with a task or activity in the face of obstacles
Doesn't become frustrated easily

Easily Frustrated
Moves on to a new task or activity when faced with obstacles. Gets frustrated easily

☼ Mood:

Positive Mood
Reacts to the world in a positive way, generally cheerful

Serious Mood
Reacts to situations negatively, mood is generally serious

[1] ZERO TO THREE, Retrieved from worldwideweb http://www.zerotothree.org/site/PageServer?pagename=key_temp June 11, 2009
[2] Dimensions of temperament (found in several places and merged/adapted).
[3] WestEd. (1995). The Program for Infant Toddler Caregivers' (PITC) Trainers Manual, module 1: Social-emotional growth and socialization (p. 21). Sacramento, CA: California Department of Education.
[4] Thomas, Chess, Birch, Hertzig, & Korn, 1963.

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We welcome your feedback on this What Works Brief. Please go to the CSEFEL Web site **(http://csefel.vanderbilt.edu/)** or call us at **(866) 433-1966** to offer suggestions.

Where Do I Find More Information on Temperament?

See the CSEFEL Web site (http://www.vanderbilt.edu/csefel) for additional resources.

Blackwell, P. L. (2004, March). The idea of temperament: Does it help parents understand their fussy babies?, *Zero to Three, 24*, 37-41.

California Department of Education, Child Development Division and Far West Laboratory, Center for Child and Family Studies. (1990). *The program for infant/toddler caregivers.* Sacramento, CA.

Honig, A. S. (2005, April). Infants & toddlers: Getting to know babies' temperaments. *Early Childhood Today*, 19(6), 20-23.

Keogh, B. K. (2002). *Temperament in the classroom: Understanding individual differences.* Baltimore, MD: Paul H. Brookes Publishing Co.

Kristal, J. (2004). *The temperament perspective: Working with children's behavioral styles.* Baltimore, MD: Paul H. Brookes Publishing Co.

Lerner, C., & Dombro, A. L. (2004). *Bringing up baby: Three steps to making good decisions in your baby's first years.* Washington, DC:ZERO TO THREE Press.

Parlakian, R., & Seibel, N. L. (2002). *Building strong foundations: Practical guidance for promoting the social-emotional development of infants and toddlers.* Washington, DC:ZERO TO THREE Press.

Sturm, L. (2004). *Temperament in early childhood: A primer for the perplexed.* Zero to Three, 24(4), 4-11.

Wittmer, D. S. & Petersen, S. H. (2006). *Infant and toddler development and responsive program planning: A relationship-based approach.* Upper Saddle River, NJ: Merrill Prentice-Hall.

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